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<210> 1418

<211> 1532

<212> PRT

<213> Homo sapiens

<400> 1418

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Ser Thr Glu Thr Thr Ser Lys Ala Gln Thr Asp Thr Leu Thr Gln Met
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           165           170           175
Thr Ala Gly Gln Glu Gly Gln Ser Arg Lys Thr Ser Trp Arg Thr Ser
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Ile Gln Asp Thr Ser Ala Ser Ser Gln Asn His Trp Thr Arg Ser Thr
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Gln Thr Thr Arg Glu Ser Gln Thr Ser Thr Leu Thr His Arg Thr Thr
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Ser Thr Pro Ser Phe Ser Pro Ser Val His Asn Val Thr Gly Thr Val
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Ser Gln Lys Thr Ser Pro Ser Gly Glu Thr Ala Thr Ser Ser Leu Cys
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Pro Val Thr Gly Ser Leu Met Pro Val Thr Ser Ala Ala Leu Val Thr
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Gln Asp Thr Thr Ala Phe Ser Lys Asn His Gln Thr Gln Ser Val Glu
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Thr Thr Arg Val Ser Gln Ile Asn Thr Leu Asn Thr Leu Thr Pro Val
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Thr Thr Ser Thr Val Leu Ser Ser Pro Ser Gly Phe Asn Pro Ser Gly
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Pro	Lys	Thr	Thr	Gly	Ala	Gly	Ala	Gln	Thr	Gln	Trp	Thr	Gln	Glu
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<211> 309

<212> DNA

<213> Homo sapiens

<400> 1419

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309

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 35 40 45
 Gly Phe Met Gln Gly Leu Ile Gly Gln Tyr Ala Val Pro Ile Leu Glu
 50 55 60
 Glu Lys Ser Val Trp Gly Thr Asp Ala Pro Thr Arg Ile Ala Tyr Met
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65          70          75          80
Pro Asp Phe Ser Gln Thr Asp Ser Ser Lys Pro Pro Leu Trp Ala Gly
85          90          95
Tyr Thr Ser Gln Ser Arg Leu Val Thr Ser Leu Leu Ser Pro Pro Gly
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<211> 336
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<213> Homo sapiens

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<211> 112
<212> PRT
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20          25          30
Val Cys Asn Ser Asn Gly Ser Val Cys Val Thr Leu Ile Asp Leu Glu
35          40          45
Leu His Asn Pro Lys Ala Ile Ala Val Asp Pro Ile Ala Gly Lys Leu
50          55          60
Phe Phe Thr Asp Tyr Gly Asn Val Ala Lys Val Glu Arg Cys Asp Met
65          70          75          80
Asp Gly Met Asn Arg Thr Arg Ile Ile Asp Ser Lys Thr Glu Gln Pro
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Ala Ala Leu Ala Leu Asp Leu Val Asn Lys Leu Val Tyr Trp Val Asp
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<210> 1425
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<212> DNA

<213> Homo sapiens

<400> 1425

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<210> 1426

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1426

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      20             25             30
Val Ile Ala Gly Glu Asp Gly Val Asp Ala Gly Val Ile Pro Met Pro
      35             40             45
Leu Arg Arg Met Gln Thr Gln Thr Leu Lys Gly Leu Arg Val Ala Trp
      50             55             60
Tyr Ser Asp Gly Gly Ile Glu Pro Val Asp Ala Leu Thr His Thr Thr
65             70             75             80
Leu Gln Ala Val Ala Asp Leu Leu Asp Ala Glu Gly Ala Leu Ile Arg
      85             90             95
Pro Ala Phe Pro Ser Ala Leu Ser Asn Ala Arg Asp Ile Thr Glu Arg
      100            105            110
Tyr Trp Ala Met Ser Gln Ser Ser Gly Ala Gln Ser Ile Gln Leu Phe
      115            120            125
Ser Asp Trp Asp Gln Phe Arg Thr Ala Met Leu Gly Phe Met Ala Asp
      130            135            140
Tyr Asp Ile Ile Leu Cys Pro Val Asp Ala Ala Pro Ala Thr Gln Leu

```

```

145          150          155          160
Gly Glu Thr Arg Pro Gly Leu Phe Ser Ser Pro Leu Pro Asn Gly Leu
          165          170          175
Ala Gly Trp Pro Cys Val Val Val Arg Ala Gly Thr Asp Ser Ala Gly
          180          185          190
Leu Pro Val Gly Val Gln Ile Val Ala Arg Pro Trp His Glu Pro Val
          195          200          205
Ala Leu Ala Ala Ala Ala Ala Ile Glu Arg Ala Leu Pro Phe Thr Arg
          210          215          220

```

<210> 1427
 <211> 270
 <212> DNA
 <213> Homo sapiens

```

<400> 1427
atggcttgct atctgaagca ggtggctgcc accgtctgca taaatgggcc cagcgcgctc
60
tttgatgttc cactaagata cggggatctg gtggtgacac ccatgcgact ggcttcggaa
120
ttgatgcaag tccatccctc aggggctgta cgtttccgtc actgttcagt tccccagaat
180
aaactcaact cacaaaagat acttccggtg gaaaaggccc aagggaagat cctcttcatt
240
gcaggagaga atgacgaaag cttggctagc
270

```

<210> 1428
 <211> 90
 <212> PRT
 <213> Homo sapiens

```

<400> 1428
Met Ala Cys Tyr Leu Lys Gln Val Ala Ala Thr Val Cys Ile Asn Gly
  1          5          10          15
Pro Ser Ala Val Phe Asp Val Pro Leu Arg Tyr Gly Asp Leu Val Val
          20          25          30
Thr Pro Met Arg Leu Ala Ser Glu Leu Met Gln Val His Pro Ser Gly
          35          40          45
Ala Val Arg Phe Arg His Cys Ser Val Pro Gln Asn Lys Leu Asn Ser
          50          55          60
Gln Lys Ile Leu Pro Val Glu Lys Ala Gln Gly Lys Ile Leu Phe Ile
65          70          75          80
Ala Gly Glu Asn Asp Glu Ser Leu Ala Ser
          85          90

```

<210> 1429
 <211> 384
 <212> DNA
 <213> Homo sapiens

```

<400> 1429
ncctagggga ttatcgacat aaacgcgact gcgtaagggtt ggtgactcat cccccagcga
60

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catgaggcaa acgccatgac atccgagaat gcaccgccgc gaggcaagat catcatgatg
 120
 gcggtgatcg ccggcgcggt ggtcaccaac atttactgca ccagccgggt gctgccgttg
 180
 atgcctcgg acatgggcgt cgcagtgtcg acgggtcaacc tgggtggcagg cgcggccttg
 240
 ctggggtttg ccaccggggt ggcgttttta ttgccatgg gcgaccgctt tgaccggcgc
 300
 aagctggtac tcgggcagat tgcgctggcg ttctgctttg ccttggcggc ggcttttgcg
 360
 ccgaggatct gggcgttgat cggc
 384

<210> 1430

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1430

Met	Thr	Ser	Glu	Asn	Ala	Pro	Pro	Arg	Gly	Lys	Ile	Ile	Met	Met	Ala
1				5					10					15	
Val	Ile	Ala	Gly	Ala	Val	Val	Thr	Asn	Ile	Tyr	Cys	Thr	Gln	Pro	Val
		20						25					30		
Leu	Pro	Leu	Ile	Ala	Ser	Asp	Met	Gly	Val	Ala	Val	Ser	Thr	Val	Asn
		35					40					45			
Leu	Val	Ala	Gly	Ala	Ala	Leu	Leu	Gly	Phe	Ala	Thr	Gly	Leu	Ala	Phe
		50				55					60				
Leu	Leu	Pro	Met	Gly	Asp	Arg	Phe	Asp	Arg	Arg	Lys	Leu	Val	Leu	Gly
65				70					75					80	
Gln	Ile	Ala	Leu	Ala	Phe	Cys	Phe	Ala	Leu	Ala	Ala	Ala	Phe	Ala	Pro
			85					90					95		
Arg	Ile	Trp	Ala	Leu	Ile	Gly									
						100									

<210> 1431

<211> 414

<212> DNA

<213> Homo sapiens

<400> 1431

aagcttcagg gcaggtgtcc cctgaagtca agcctgattc tgcacatctt tgtatagcac
 50
 aaactggcga cacctgtgac tttgcctttc ccagggtccc tgctctccgc tccaggtagg
 120
 ctcagcctga gggaggtgct ggcaggagcc tcggaggcag gaggggctgg cgtgcttcac
 180
 tccttcagct tgtcttgga gagctgtggg ctgcatcccc ctggctcctc gtccacagg
 240
 cagccccgct gtgtgtctgg tcttgagggt tggtgcagc ttctgggccc tgcttcagc
 300
 cctctctccc atgacctcc agccttgga ggtgtaatat tttcccatgt tgctgatctt
 360
 tagtttgctt cctctcctt ggctgttctt ttgctgttcc cactctctgt gcac
 414

<210> 1432
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1432
 Met Gly Asn Tyr Tyr Thr Phe Gln Gly Trp Arg Ile Met Gly Arg Gly
 1 5 10 15
 Ala Gly Ser Arg Ala Gln Lys Leu Gln Pro Thr Cys Lys Thr Arg His
 20 25 30
 Thr Ala Gly Leu Pro Val Gly Arg Gly Ala Arg Gly Met Gln Pro Thr
 35 40 45
 Ala Leu Pro Arg Gln Ala Glu Gly Val Lys His Ala Ser Pro Ser Cys
 50 55 60
 Leu Arg Gly Ser Cys Gln His Leu Pro Gln Ala Glu Pro Thr Trp Ser
 65 70 75 80
 Gly Glu Gln Gly Pro Trp Glu Arg Gln Ser His Arg Cys Arg Gln Phe
 85 90 95
 Val Leu Tyr Lys Met Met Gln Asn Gln Ala
 100 105

<210> 1433
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 1433
 aaattttcga tggaactggg cggcaatgca cggtttattg tatttgatga tgcggatgtg
 60
 gacgcggccg tcagcaatgc tgtggcttgc aagttccgct gtggtggaca aacgtgcatt
 120
 tcggccaacc gaatctacgt gcacgaacaa gtgcacgacg agtttgtctc taagtttggc
 180
 gagagagtca agaagcttcg cgtgggctac ggtctggacg aaaacatcaa cattggaccg
 240
 ctagtgaatg aggctagtca ggacaaagca gagtcacatg tccgtgcat gcaa
 294

<210> 1434
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1434
 Lys Phe Ser Met Glu Leu Gly Gly Asn Ala Pro Phe Ile Val Phe Asp
 1 5 10 15
 Asp Ala Asp Val Asp Ala Ala Val Ser Asn Ala Val Ala Cys Lys Phe
 20 25 30
 Arg Cys Gly Gly Gln Thr Cys Ile Ser Ala Asn Arg Ile Tyr Val His
 35 40 45
 Glu Gln Val His Asp Glu Phe Val Ser Lys Phe Gly Glu Arg Val Lys
 50 55 60
 Lys Leu Arg Val Gly Tyr Gly Leu Asp Glu Asn Ile Asn Ile Gly Pro

65		70		75		80									
Leu	Val	Asn	Glu	Ala	Ser	Gln	Asp	Lys	Ala	Glu	Ser	His	Val	Arg	Ala
				85					90					95	
Met	Gln														

<210> 1435

<211> 1772

<212> DNA

<213> Homo sapiens

<400> 1435

```

ntttctggct tatgtggttt ccccggtgtgt gaggtgggat ccactccccg catagtctct
60
cgtggcgatg ggacacctgg aaagtgtgtg gatgtctttg aatgtgttaa tgatacaaag
120
ccagcctgcg tattaacaa tgtggaatat tatgatggag acatgtttcg aatggacaac
180
tgtcggttct gtcgatgcca agggggcggt gccatctgct tcaactgcca gtgtggtgag
240
ataaactgcg agaggtacta cgtgcccga ggagagtgtg gccagtgtg tgaaatccag
300
tgtatccttt taataatccc gctggctgct gccaatggcc tgatccttgc ccacggagac
360
cgttgccggg aagacgactg cacattctgc cagtgcgtca acggtgaacg ccactgcgtt
420
gcgaccgtct gcggacagac ctgcacaaac cctgtgaaag tgccctggga gtgttgccct
480
gtgtgccaag aaccaaccat catcacagtt gatccacctg catgtgggga gttatcaaac
540
tgcaactctga cagggaagga ctgcattaat gggttcaaac gcgatcacia tgggtgtcgg
600
acctgtcagt gcataaacac cgaggaacta tgttcagaac gtaaacaagg ctgcacctg
660
aactgtccct tcggtttcct tactgatgcc caaaactgtg agatctgtga gtgccgccca
720
aggcccaaga agtgcagacc cataatctgt gacaagtatt gtccacttgg attgctgaag
780
aataagcacg gctgtgacat ctgtcgctgt aagaaatgtc cagagctctc atgcagtaag
840
natctgcccc ttgggtttcc agcaggacag tcacggctgt cttatctgca agtgcagaga
900
ggcctctgct tcagctgggc caccatcct gtcgggcact tgtctcaccg tggatggtca
960
tcatacaaaa aatgaggaga gctggcacga tgggtgccgg gaatgctact gtctcaatgg
1020
acgggaaatg tgtgcctga tcacctgcc ggtgcctgcc tgtggcaacc ccaccattca
1080
ccctggacag tgctgcccac catgtgcaga tgactttgtg gtgcagaagc cagagctcag
1140
tactcnnct ccatttgcca cgccttgga ggagaatact ttgtggaagg agaaactggtg
1200
aacattgact cctgtactca gtgcacctgc cacagcggac ggggtgctgtg tgagacagag
1260

```

gtgtgcccac cgtgtgctctg ccagaacccc tcacgcaccc aggattcctg ctgcccacag
 1320
 tgtacagatc aaccttttcg gccttccttg tcccgcata acagcgtacc taattactgc
 1380
 aaaaatgatg aaggggatat attcctggca gctgagtcct ggaagcctga cgtttgtagc
 1440
 agctgcatct gcattgatag cgtaattagc tgtttctctg agtcctgcc ttctgtatcc
 1500
 tgtgaaaaac ctgtcttgag aaaaggccag tgttgctcct actgcataga agacacaatt
 1560
 ccaagaagg tgggtgtgcca cttcagtggg aaggcctatg ccgacgagga gcggtgggac
 1620
 cttgacagct gcacccactg ctactgcctg cagggccaga ccttctgctc gaccgtcage
 1680
 tgccccctc tgccctgtgt tgagcccatc aacgtggaag gaagttgctg cccaatgtgt
 1740
 ccagaaatgt atgtcccagt cccttcacgc gt
 1772

<210> 1436

<211> 322

<212> PRT

<213> Homo sapiens

<400> 1436

Xaa	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	Val	Gly	Ser	Thr	Pro
1				5					10					15	
Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	Lys	Cys	Cys	Asp	Val
			20					25					30		
Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	Val	Phe	Asn	Asn	Val
		35					40					45			
Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	Asn	Cys	Arg	Phe	Cys
	50					55					60				
Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	Ala	Gln	Cys	Gly	Glu
65					70					75					80
Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	Glu	Cys	Cys	Pro	Val
			85						90					95	
Cys	Glu	Ile	Gln	Cys	Ile	Leu	Leu	Ile	Ile	Pro	Leu	Ala	Ala	Ala	Asn
			100						105					110	
Gly	Leu	Ile	Leu	Ala	His	Gly	Asp	Arg	Trp	Arg	Glu	Asp	Asp	Cys	Thr
		115					120					125			
Phe	Cys	Gln	Cys	Val	Asn	Gly	Glu	Arg	His	Cys	Val	Ala	Thr	Val	Cys
	130					135					140				
Gly	Gln	Thr	Cys	Thr	Asn	Pro	Val	Lys	Val	Pro	Gly	Glu	Cys	Cys	Pro
145					150					155					160
Val	Cys	Glu	Glu	Pro	Thr	Ile	Ile	Thr	Val	Asp	Pro	Pro	Ala	Cys	Gly
			165						170					175	
Glu	Leu	Ser	Asn	Cys	Thr	Leu	Thr	Gly	Lys	Asp	Cys	Ile	Asn	Gly	Phe
		180						185					190		
Lys	Arg	Asp	His	Asn	Gly	Cys	Arg	Thr	Cys	Gln	Cys	Ile	Asn	Thr	Glu
	195					200						205			
Glu	Leu	Cys	Ser	Glu	Arg	Lys	Gln	Gly	Cys	Thr	Leu	Asn	Cys	Pro	Phe
	210					215					220				
Gly	Phe	Leu	Thr	Asp	Ala	Gln	Asn	Cys	Glu	Ile	Cys	Glu	Cys	Arg	Pro

```

225          230          235          240
Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys Asp Lys Tyr Cys Pro Leu
          245          250          255
Gly Leu Leu Lys Asn Lys His Gly Cys Asp Ile Cys Arg Cys Lys Lys
          260          265          270
Cys Pro Glu Leu Ser Cys Ser Lys Xaa Leu Pro Leu Gly Phe Pro Ala
          275          280          285
Gly Gln Ser Arg Leu Ser Tyr Leu Gln Val Gln Arg Gly Leu Cys Phe
          290          295          300
Ser Trp Ala Thr His Pro Val Gly His Leu Ser His Arg Gly Trp Ser
305          310          315          320
Ser Ser

```

<210> 1437

<211> 372

<212> DNA

<213> Homo sapiens

<400> 1437

```

cgggaaactgt gctcgccac catccggtga ccggtgtcgg gcagtggcaa ctcaacaccc
60
aggccatgac cggagccatc ccgagcagca ggtgcacggc cggggccggt gactcgtgga
120
cccgtaccct catgacctcg atgcaacttc cacggtgggt caccgatcac atcgaccgct
180
cgggtccatgt cgatgctgag cagttcgacc ggttcgcgag cgagttcctg tcccgtgggc
240
acagttcttg cctgcccga catgggggtcc tgggacttgg cgggggcctg ggtggccaga
300
cgcggttct ccccgagttc cgtcgaggag aatcttccga gggcacagtt cgagttgttc
360
tgccgcacgc gt
372

```

<210> 1438

<211> 62

<212> PRT

<213> Homo sapiens

<400> 1438

```

Met Ser Met Leu Ser Ser Ser Thr Gly Cys Ala Ala Ser Ser Cys Pro
1          5          10          15
Val Gly Thr Val Leu Ala Leu Pro His Met Gly Ser Trp Asp Leu Ala
          20          25          30
Gly Ala Trp Val Ala Arg Arg Gly Phe Ser Pro Ser Ser Val Ala Glu
          35          40          45
Asn Leu Pro Arg Ala Gln Phe Glu Leu Phe Cys Arg Thr Arg
50          55          60

```

<210> 1439

<211> 471

<212> DNA

<213> Homo sapiens

<400> 1439

accggtttgc ttccacaag gagagctaaa atgccggttg ctaagcagca tacatgccgc
 60
 tgcttctttc cacaatgtag acttaaaaaa atcgccgtaa acattttacc atatgattga
 120
 gtcaggtgtg gggagtcgca gtaaacattt taccatgtga ttgagtcatg ggtggggagt
 180
 cgcggaata cacagggcag gcagttcgct atcacgatgt tctctctcat ttctgtcttt
 240
 ggtctgtctt cctgggtaat gtcacatgga gaccagggg atctgccatc agctgtgtgc
 300
 agtgggtaaa caagacgacg gggaacttca gagtgcaggc agtcctcatc ttggcagat
 360
 tctgtatttg cacattcacc cactcactga aatgcatttg taaccccaaa atcaatacag
 420
 cggtttcaca gtcattttcc gacacgggca gagggtgaa gatactgagt c
 471

<210> 1440

<211> 101

<212> PRT

<213> Homo sapiens

<400> 1440

Met	Gly	Gly	Glu	Ser	Arg	Lys	Tyr	Thr	Gly	Gln	Ala	Val	Arg	Tyr	His
1				5					10					15	
Asp	Val	Leu	Ser	His	Phe	Cys	Leu	Trp	Ser	Val	Phe	Leu	Gly	Asn	Val
			20					25					30		
Thr	Trp	Arg	Pro	Arg	Gly	Ser	Ala	Ile	Ser	Cys	Val	Gln	Trp	Val	Asn
		35				40						45			
Lys	Thr	Thr	Gly	Asn	Phe	Arg	Val	Gln	Ala	Val	Leu	Ile	Phe	Gly	Arg
	50					55					60				
Phe	Cys	Ile	Cys	Thr	Phe	Thr	His	Ser	Leu	Lys	Cys	Ile	Cys	Asn	Pro
65				70					75					80	
Lys	Ile	Asn	Thr	Ala	Val	Ser	Gln	Ser	Phe	Ser	Asp	Thr	Gly	Arg	Gly
			85					90						95	
Val	Lys	Ile	Leu	Ser											
			100												

<210> 1441

<211> 376

<212> DNA

<213> Homo sapiens

<400> 1441

nnnagatcgc ggggaccttc atggactctc tcgtgctccg tagctcacac tcaccgcacg
 60
 gcagctcaca ttcaccacac gggaactcac tctcaccaca cggcagctca ctctctctgc
 120
 accgcagctc acactcaccg cacggcagct cactctcacc gcacggcagc tcacactcac
 180
 cacacagcag ctactctta ccggacgggg aacctaaact taccggacgg gaagcctcac
 240

tctcaccgca cggaaagctc acactcaccg caccgcagcc actctcaccg caccggcagct
 300
 cactctcacc gcaccgcagc tcactctcac cggacggggag ctactctca ccacacggca
 360
 cctcactctc acgcgt
 376

<210> 1442
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1442
 Xaa Glu Ser Arg Gly Pro Ser Trp Thr Leu Ser Cys Ser Val Ala His
 1 5 10 15
 Thr His Arg Thr Ala Ala His Ile His His Thr Gly Thr His Ser His
 20 25 30
 His Thr Ala Ala His Ser Leu Cys Thr Ala Ala His Thr His Arg Thr
 35 40 45
 Ala Ala His Ser His Arg Thr Ala Ala His Thr His Thr Ala Ala
 50 55 60
 His Ser Tyr Arg Thr Gly Asn Leu Asn Leu Pro Asp Gly Lys Pro His
 65 70 75 80
 Ser His Arg Thr Glu Ser Ser His Ser Pro His Arg Ser His Ser His
 85 90 95
 Arg Thr Ala Ala His Ser His Arg Thr Ala Ala His Ser His Arg Thr
 100 105 110
 Gly Ala His Ser His His Thr Ala Pro His Ser His Ala
 115 120 125

<210> 1443
 <211> 286
 <212> DNA
 <213> Homo sapiens

<400> 1443
 atggcagccc tgcgtcccaa ggagctgcc aactaatgg tcgccatcgg caatgcgagc
 60
 ataaaacgga caacacgctg cctgatcgaa tggcaactcc acaccatgac cgtctctgcg
 120
 gaagccgcta cgacttcctg ggctgacatc gactgcgaca agaaaacctg gacgatccca
 180
 gcggagcgta tgaaaaagcg acgtgcccac gtcataccgc taaccgagca cgcacttgcc
 240
 ttgcttgaga caatcaaacc ctacagcggn cacagagagt acgcgt
 286

<210> 1444
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1444
 Met Ala Ala Leu Arg Pro Lys Glu Leu Pro Gln Leu Met Val Ala Ile

```

      1             5             10             15
Gly Asn Ala Ser Ile Lys Arg Thr Thr Arg Cys Leu Ile Glu Trp Gln
      20             25             30
Leu His Thr Met Thr Arg Pro Ala Ala Thr Thr Ser Trp Ala
      35             40             45
Asp Ile Asp Cys Asp Lys Lys Thr Trp Thr Ile Pro Ala Glu Arg Met
      50             55             60
Lys Lys Arg Arg Ala His Val Ile Pro Leu Thr Glu His Ala Leu Ala
      65             70             75             80
Leu Leu Glu Thr Ile Lys Pro Tyr Ser Gly His Arg Glu Tyr Ala
      85             90             95

```

<210> 1445
 <211> 294
 <212> DNA
 <213> Homo sapiens

```

<400> 1445
naccggttca ccggggaggc cttcgatggg ggcaaggcca gcatgggttg cccgattccc
60
atgtacctgt atggcacctt cgtcgttccg gacttcgacg cattcatctc eggcaagcag
120
actccctacc gggagacggg ctccaagcgg accactactt ggttctttcg agccggctca
180
gaggtttatg agctggccnt cccccgagga gtcgtgttcg ccatgcaaag cgcctcgttg
240
aggggtggacc ccgacaacac cgtcgacaag ctgccaaacac tcggcgagcg cctg
294

```

<210> 1446
 <211> 98
 <212> PRT
 <213> Homo sapiens

```

<400> 1446
Xaa Arg Phe Thr Gly Glu Ala Phe Asp Gly Gly Lys Val Ser Met Val
      1             5             10             15
Gly Pro Ile Pro Met Tyr Leu Tyr Gly Thr Phe Val Val Pro Asp Phe
      20             25             30
Asp Ala Phe Ile Ser Gly Lys Gln Thr Pro Tyr Arg Glu Thr Val Ser
      35             40             45
Lys Arg Thr Thr Thr Trp Phe Phe Arg Ala Gly Ser Glu Val Tyr Glu
      50             55             60
Leu Ala Xaa Pro Arg Gly Val Val Phe Ala Met Gln Ser Ala Ser Leu
      65             70             75             80
Arg Val Asp Pro Asp Asn Thr Val Asp Lys Leu Pro Thr Leu Gly Glu
      85             90             95
Arg Leu

```

<210> 1447
 <211> 363
 <212> DNA
 <213> Homo sapiens

<400> 1447

nnncagaacc agaagatcaa cctgcatgac ggctcgttct ccgacgttgg cggcatgggtg
 60
 ggtaatatct ccattgcccc ggggtgtcacg atcgagaacg ccgtcggcgg ttcgggcaac
 120
 gacctgctga tcggcaacga tgcggccaac gaactgcgcg gcgggtgccgg caacgatatc
 180
 ctctacgggg ctggcgggtgc cgaccaggtt tgggttggtt cgggcaacaa taccttcgtg
 240
 ttccgcccg tttccgactc ggcgccgaaa gcggccgacc ggatcatgga cttcaccagt
 300
 ggccaggaca agatcgatct gtccgggatc acccatgggt cgggcctgac cttcgtcaac
 360
 gcg
 363

<210> 1448

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1448

Xaa	Gln	Asn	Gln	Lys	Ile	Asn	Leu	His	Asp	Gly	Ser	Phe	Ser	Asp	Val
1				5				10					15		
Gly	Gly	Met	Val	Gly	Asn	Ile	Ser	Ile	Ala	Gln	Gly	Val	Thr	Ile	Glu
		20					25					30			
Asn	Ala	Val	Gly	Gly	Ser	Gly	Asn	Asp	Leu	Leu	Ile	Gly	Asn	Asp	Ala
	35					40					45				
Ala	Asn	Glu	Leu	Arg	Gly	Gly	Ala	Gly	Asn	Asp	Ile	Leu	Tyr	Gly	Ala
	50				55					60					
Gly	Gly	Ala	Asp	Gln	Val	Trp	Val	Gly	Ser	Gly	Asn	Asn	Thr	Phe	Val
65				70					75					80	
Phe	Ala	Ala	Val	Ser	Asp	Ser	Ala	Pro	Lys	Ala	Ala	Asp	Arg	Ile	Met
			85					90						95	
Asp	Phe	Thr	Ser	Gly	Gln	Asp	Lys	Ile	Asp	Leu	Ser	Gly	Ile	Thr	His
		100				105							110		
Gly	Ser	Gly	Leu	Thr	Phe	Val	Asn	Ala							
	115						120								

<210> 1449

<211> 541

<212> DNA

<213> Homo sapiens

<400> 1449

aggcgctacc agattatggg ctgcccgacc tcaatgacat gcgcttgagc ctgcatgaat
 60
 cactcagcca atcgcgcttg gcgattgaac gctttatcca ggcgtacgag cctcggttgg
 120
 ggaatgtacg tgtcaggagg agggaggggtg cctacaaccc tttggtactg gcgtttgtga
 180
 ttgaggcaac cgtcgtcatc gatgggtgca tccaacctgt ggtgtttaac gcacacctgg
 240

tggggggggg gacgggtcga gtgtgttacc tgatgttctt tgagctcttt taccagagtg
 300
 aactcagtgc attgcgacac cttgggcggc gtttttctga acgcaatccc gccctggcac
 360
 cctttcttgc cgattccagg ccaggaccgc gacgtcgagg gtctattgaa agtctttggc
 420
 tttctccccg ggcgcctgcg ccagaagctt gctgacgagc ttctgagggt gacccattca
 480
 ttgatgcact tgggtgtggc caattacatg cggccattgc cggccttcag tattttgcag
 540
 t
 541

<210> 1450

<211> 138

<212> PRT

<213> Homo sapiens

<400> 1450

Met	Arg	Leu	Ser	Leu	His	Glu	Ser	Leu	Ser	Gln	Ser	Arg	Leu	Ala	Ile
1				5				10					15		
Glu	Arg	Phe	Ile	Gln	Ala	Tyr	Glu	Pro	Arg	Leu	Gly	Asn	Val	Arg	Val
			20					25				30			
Arg	Arg	Arg	Glu	Gly	Ala	Tyr	Asn	Pro	Leu	Val	Leu	Ala	Phe	Val	Ile
			35				40					45			
Glu	Ala	Thr	Val	Val	Ile	Asp	Gly	Val	Ile	Gln	Pro	Val	Val	Phe	Asn
			50				55				60				
Ala	His	Leu	Val	Gly	Gly	Gly	Thr	Gly	Arg	Val	Cys	Tyr	Leu	Met	Phe
65					70				75				80		
Phe	Glu	Leu	Phe	Tyr	Gln	Ser	Glu	Leu	Ser	Ala	Leu	Arg	Thr	Leu	Gly
			85						90				95		
Arg	Arg	Phe	Ser	Glu	Arg	Asn	Pro	Ala	Leu	Ala	Pro	Phe	Leu	Ala	Asp
			100				105					110			
Ser	Arg	Pro	Gly	Pro	Gly	Arg	Arg	Gly	Ser	Ile	Glu	Ser	Leu	Cys	Leu
			115				120					125			
Ser	Pro	Arg	Ala	Pro	Ala	Pro	Glu	Ala	Cys						
			130				135								

<210> 1451

<211> 326

<212> DNA

<213> Homo sapiens

<400> 1451

aggcctctgg cgagttgatc tacagcttcg gacccgggtgc tatggctact ggcgtcaagt
 60
 acacgaacac agtttgcact cctgtgggcg actacgaggt ggtgctgacg gattcttggg
 120
 gtgatggctg gaaccgggt tcttacctga acatgtacga cagctcggac aacttgatcc
 180
 aggagttcac gatggattac gacgcctctt ctcgtaacat taaggagaag cacggcttct
 240
 tcacggtggc ttccaccacg agcagcggca ctgtctggaa gattatggcg aacaagaagg
 300

tggacaagga gtggaactct gtggac
326

<210> 1452
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1452
Met Ala Thr Gly Val Lys Tyr Thr Asn Thr Val Cys Thr Pro Val Gly
1 5 10 15
Asp Tyr Glu Val Leu Thr Asp Ser Trp Gly Asp Gly Trp Asn Pro
20 25 30
Gly Ser Tyr Leu Asn Met Tyr Asp Ser Ser Asp Asn Leu Ile Gln Glu
35 40 45
Phe Thr Met Asp Tyr Asp Ala Ser Ser Arg Asn Ile Lys Glu Lys His
50 55 60
Gly Phe Phe Thr Val Ala Ser Thr Thr Ser Ser Gly Thr Val Trp Lys
65 70 75 80
Ile Met Ala Asn Lys Lys Val Asp Lys Glu Trp Asn Ser Val Asp
85 90 95

<210> 1453
<211> 326
<212> DNA
<213> Homo sapiens

<400> 1453
cggccgcgcg gcccacgtg caccgcgtgc atggtccctc gaggacgcgc atctgcagcc
60
cccgtcccc gcaaacctcc aggcgggaga gctccggcca aggcgcgtgc atcacatgat
120
acaggagggg catgcacacg ctcacgtgca cacagcctca aacacgctca tccgtacata
180
caggagtgtg tgaacgcact gaggtgcaca ggacaaagac acagacacct gtttgcacac
240
cgactcgcct atagaaatgt gcaaaccacc cgtgcgcaca ggcccctcca cccatgcagg
300
cgtgtgcaca tcaccacac ggacac
326

<210> 1454
<211> 98
<212> PRT
<213> Homo sapiens

<400> 1454
Met Val Pro Arg Gly Arg Ala Ser Ala Ala Pro Ala Pro Arg Lys Pro
1 5 10 15
Pro Gly Arg Arg Ala Pro Ala Lys Ala Ala Ala Ser His Asp Thr Gly
20 25 30
Gly Ala Cys Thr Arg Ser Arg Ala His Ser Leu Lys His Ala His Pro
35 40 45
Tyr Ile Gln Glu Cys Val Asn Ala Leu Arg Cys Thr Gly Gln Arg His

50 55 60
 Arg His Leu Phe Ala His Arg Leu Ala Tyr Arg Asn Val Gln Thr Thr
 65 70 75 80
 Arg Ala His Arg Pro Leu His Pro Cys Arg Arg Val His Ile Thr His
 85 90 95
 Thr Asp

<210> 1455
 <211> 314
 <212> DNA
 <213> Homo sapiens

<400> 1455
 gatccagtca aaaaagcatg tgggggttgct cacgctgggt ggaaagggtac tttgttgggt
 60
 gttgctatgg ctacagtga tgctatgata gcagaatatg gctgccgttt ggaaaaactt
 120
 tgggtggacct tggacccttc agtgggacct ggctgtttta ctcttcagg ggaatcagca
 180
 gaggcatttc ataatcttca tcttgcattg gtacaactat ttgattcacc aaatccctgt
 240
 atcgacatcc gtaaagccac aagatacttg actggatttt tgtataactg cttcctgcct
 300
 ccttccaaac tgac
 314

<210> 1456
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1456
 Asp Pro Val Lys Lys Ala Cys Gly Val Ala His Ala Gly Trp Lys Gly
 1 5 10 15
 Thr Leu Leu Gly Val Ala Met Ala Thr Val Asn Ala Met Ile Ala Glu
 20 25 30
 Tyr Gly Cys Arg Leu Glu Lys Leu Trp Trp Thr Leu Asp Pro Ser Val
 35 40 45
 Gly Pro Gly Cys Phe Thr Leu Pro Gly Glu Ser Ala Glu Ala Phe His
 50 55 60
 Asn Leu His Pro Ala Cys Val Gln Leu Phe Asp Ser Pro Asn Pro Cys
 65 70 75 80
 Ile Asp Ile Arg Lys Ala Thr Arg Tyr Leu Thr Gly Phe Leu Tyr Asn
 85 90 95
 Cys Phe Leu Pro Pro Ser Lys Leu
 100

<210> 1457
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1457

nattcaccag aatccccaga atcccccaaa tactacattg cacttttaggg ttcctttcta
 60
 gcacatgcat tgctaaaatc ggcgccaga accttctctg ccctctccc atgggatgca
 120
 atgtcagcgg agaaacagac caagtctgca ctagcctgtc cctacaccct cccagggaaa
 180
 aggtccccct gcgccaagtc aacagctccc agaggaagcc cactgactgc tctcttcagg
 240
 gtgggggaca caggaagtcc acgcttgac ggaggggacg ggcacaccta ccgtgactgc
 300
 cagagcccat tttgggagtc tgattggaat ttatacagca ggagcactgg gcactcggac
 360
 aactccagcc cacaaccaag tcaactgggt gcctaccac tgccaagtg cctcaagtca
 420
 acacattcct gactgn
 437

<210> 1458

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1458

Met	Ser	Ala	Glu	Lys	Gln	Thr	Lys	Ser	Ala	Leu	Ala	Cys	Pro	Tyr	Thr
1				5				10				15			
Leu	Pro	Arg	Lys	Arg	Ser	Pro	Cys	Ala	Lys	Ser	Thr	Ala	Pro	Arg	Gly
			20					25				30			
Ser	Pro	Leu	Thr	Ala	Leu	Phe	Arg	Val	Gly	Asp	Thr	Gly	Ser	Pro	Arg
		35					40					45			
Leu	His	Gly	Gly	Asp	Gly	His	Thr	Tyr	Arg	Asp	Cys	Gln	Ser	Pro	Phe
	50					55					60				
Trp	Glu	Ser	Asp	Trp	Asn	Leu	Tyr	Ser	Arg	Ser	Thr	Gly	His	Ser	Asp
65					70				75					80	
Asn	Ser	Ser	Pro	Gln	Pro	Ser	His	Trp	Ala	Ala	Tyr	Pro	Leu	Pro	Lys
				85				90						95	
Cys	Leu	Lys	Ser	Thr	His	Ser	Cys	Thr							
			100					105							

<210> 1459

<211> 295

<212> DNA

<213> Homo sapiens

<400> 1459

ngagaggatca ccggccacga gattcccgcg gaggtcgcgc ccgcgcgcg gggcgacccg
 60
 gccgtactca tcgcttcttc ggagaagatc aagcgggagc tgggctggaa cccgacgcgc
 120
 acggatctgc gccgatcgt cgaggacgcc tgggccttta cggtggggg ggccgaacgg
 180
 taaacccttg gtaaggcgac gcagttatcc tcgatctcct cccagagcag gcggcagccc
 240
 gccactgcgg tgcgagcat gcctccac tccccgatcg ccatgagctg gcan
 295

<210> 1460
 <211> 60
 <212> PRT
 <213> Homo sapiens

<400> 1460
 Xaa Glu Val Thr Gly His Glu Ile Pro Ala Glu Val Ala Pro Arg Arg
 1 5 10 15
 Ala Gly Asp Pro Ala Val Leu Ile Ala Ser Ser Glu Lys Ile Lys Arg
 20 25 30
 Glu Leu Gly Trp Asn Pro Thr Arg Thr Asp Leu Arg Arg Ile Val Glu
 35 40 45
 Asp Ala Trp Ala Phe Thr Ala Gly Gly Ala Glu Arg
 50 55 60

<210> 1461
 <211> 432
 <212> DNA
 <213> Homo sapiens

<400> 1461
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 60
 gttgaagcac agtcaattgc gggttctaaa tgcgaacacg cctggcgctt acaacgttca
 120
 gaaaatgact gggtaggctt tgaaaaaaat tggaaagagg ttgttgcat atcccgtgaa
 180
 gaagcacaaa ttcgcggtga agcgcttaat ctaacgcctt atgatgcat gcttgataag
 240
 tttgaaccag gcacgacaac ggtttcgctc aatactttgt tttcaaagg aaagacgtgg
 300
 ttacctacgt taattgaaaa agcgcttagaa aagcagcaat cagaatctat cattatgcca
 360
 tcaggcacct tttccacggc gaatcaaaaa gcccttggat tagaaataat gaaattgtta
 420
 aaattcgact tt
 432

<210> 1462
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 1462
 Xaa Ser Leu Arg Glu Met Lys Arg Gln Trp Gln Gln Ala Thr Ile Val
 1 5 10 15
 Pro Glu Lys Leu Val Glu Ala Gln Ser Ile Ala Gly Ser Lys Cys Glu
 20 25 30
 His Ala Trp Arg Leu Gln Arg Ser Glu Asn Asp Trp Val Gly Phe Glu
 35 40 45
 Lys Asn Trp Lys Glu Val Val Ala Leu Ser Arg Glu Glu Ala Gln Ile
 50 55 60
 Arg Gly Glu Ala Leu Asn Leu Thr Pro Tyr Asp Ala Met Leu Asp Lys

```

65              70              75              80
Phe Glu Pro Gly Thr Thr Thr Val Ser Leu Asn Thr Leu Phe Ser Lys
              85              90              95
Val Lys Thr Trp Leu Pro Thr Leu Ile Glu Lys Ala Leu Glu Lys Gln
              100              105              110
Gln Ser Glu Ser Ile Ile Met Pro Ser Gly Thr Phe Ser Thr Ala Asn
              115              120              125
Gln Lys Ala Leu Gly Leu Glu Ile Met Lys Leu Leu Lys Phe Asp Phe
              130              135              140

```

<210> 1463

<211> 421

<212> DNA

<213> Homo sapiens

<400> 1463

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nacgcgttcc agagcaagct ggacctgacc gccttcgaat tcttctccga caaggccctg
60
gcaaaagtca tgggcccgtg cgacgtaccg gcaccgttcg aaaccgaatg cccgttctac
120
gcgctgctgg aattcgaagc caccaccgaa gaagtcgcca accacgccct ggaaaccttc
180
gagcactgcg ttgagcaggg ctgggtgctg gacggcgtga tgagccagag cgaaacccaa
240
ctgcacaacc tgtggaaact gcgcgagtag atctcggaga ctatttccca ctggacgccc
300
tacaagaacg acatctccgt gaccgtttcc aaagtccccg cgttcttgaa ggaaattgac
360
gcgatcgctg tgagcattac ccggacttcg aaattgttgg tcggccacat cggcgacgca
420
a
421

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<210> 1464

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1464

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Xaa Ala Phe Gln Ser Lys Leu Asp Leu Thr Ala Phe Glu Phe Phe Ser
 1              5              10              15
Asp Lys Ala Leu Ala Lys Val Met Gly Arg Gly Asp Val Pro Ala Pro
              20              25              30
Phe Glu Thr Glu Cys Pro Phe Tyr Ala Leu Leu Glu Phe Glu Ala Thr
              35              40              45
Thr Glu Glu Val Ala Asn His Ala Leu Glu Thr Phe Glu His Cys Val
              50              55              60
Glu Gln Gly Trp Val Leu Asp Gly Val Met Ser Gln Ser Glu Thr Gln
65              70              75              80
Leu His Asn Leu Trp Lys Leu Arg Glu Tyr Ile Ser Glu Thr Ile Ser
              85              90              95
His Trp Thr Pro Tyr Lys Asn Asp Ile Ser Val Thr Val Ser Lys Val
              100              105              110
Pro Ala Phe Leu Lys Glu Ile Asp Ala Ile Val Val Ser Ile Thr Arg

```

115 120 125
 Thr Ser Lys Leu Leu Val Gly His Ile Gly Asp Ala
 130 135 140

<210> 1465
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1465
 gtgcacggtc tttgagctgc aattcccagg aatcaggggc cataggcggt agatggcatg
 60
 cagcctctcg ggcgggaaag tggctctacag tgcttgcttg cccgggcagg cagctcgtag
 120
 gcttatatgc ttagtggtta tggcccctac cactgttttt gaccgcgcta ccattcgcca
 180
 caacctcacc gaattcaaac tccggtggat ttcccacgcc gagcagtgga aggcggaaaa
 240
 ccgtcctgca acagagtcta aagccgctga gacggactgc tcagtacatg gggatctctg
 300
 gaccttggcc acggaagttt tcgggtcaagc acccgaattc gacttcccat atatgaaact
 360
 cactcggcag gaatgtaggt tcctttttct gccgagaaac gacatcagct tgagctgctt
 420
 cacg
 424

<210> 1466
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 1466
 Met Ala Cys Ser Leu Ser Gly Gly Lys Val Val Tyr Ser Ala Cys Leu
 1 5 10 15
 Pro Gly Gln Ala Ala Arg Arg Leu Ile Cys Leu Val Val Met Ala Pro
 20 25 30
 Thr Thr Val Phe Asp Arg Ala Thr Ile Arg His Asn Leu Thr Glu Phe
 35 40 45
 Lys Leu Arg Trp Ile Ser His Ala Glu Gln Trp Lys Ala Glu Asn Arg
 50 55 60
 Pro Ala Thr Glu Ser Lys Ala Ala Glu Thr Asp Cys Ser Val His Gly
 65 70 75 80
 Asp Leu Trp Thr Leu Ala Thr Glu Val Phe Gly Gln Ala Pro Glu Phe
 85 90 95
 Asp Phe Pro Tyr Met Lys Leu Thr Arg Gln Glu Cys Arg Phe Leu Phe
 100 105 110
 Leu Pro Arg Asn Asp Ile Ser Leu Ser Cys Phe Thr
 115 120

<210> 1467
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1467

nacgcgtgac ggcgaaatgag cggcggaggc atgacaacga gcgcaccgtt ccgcagcttg
 60
 gtgccgtgca tcatggctca agtgccgcgc aactttcggc tgctcgagga gctggagaaa
 120
 ggcgaaaagg ggctaggaaa tggctcgtgc tcttacggcc ttgcgaacag tgatgacatt
 180
 cgtacgtatg cgctgtgct gatggtcacg acaacgtgga atgccacgat cctaggccccg
 240
 gccaaactcgg tgcattgagaa ccgcataatac tgcttcgcgc tcgtgtgtgg cgactcgtac
 300
 cctcttctgac cgcttgagat ttggttccag acgcgcacatc acttgccgtg cgtcgtatgcc
 360
 cacacggggc gcgtcatgcc cgatcagttc tcgccccctc tgcattggcg tgatgagtac
 420
 actatggaaa gctgctgcat g
 441

<210> 1468

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1468

Met	Ala	Gln	Val	Pro	Arg	Asn	Phe	Arg	Leu	Leu	Glu	Glu	Leu	Glu	Lys
1				5					10					15	
Gly	Glu	Lys	Gly	Leu	Gly	Asn	Gly	Ser	Cys	Ser	Tyr	Gly	Leu	Ala	Asn
			20					25					30		
Ser	Asp	Asp	Ile	Arg	Thr	Tyr	Ala	Pro	Val	Leu	Met	Val	Met	Thr	Thr
			35				40					45			
Trp	Asn	Ala	Thr	Ile	Leu	Gly	Pro	Ala	Asn	Ser	Val	His	Glu	Asn	Arg
			50			55					60				
Ile	Tyr	Cys	Leu	Arg	Leu	Val	Cys	Gly	Asp	Ser	Tyr	Pro	Leu	Val	Pro
65				70					75					80	
Pro	Glu	Ile	Trp	Phe	Gln	Thr	Arg	Ile	Asn	Leu	Pro	Cys	Val	Asp	Ala
				85				90					95		
His	Thr	Gly	Arg	Val	Met	Pro	Asp	Gln	Phe	Ser	Pro	Leu	Leu	His	Trp
			100				105					110			
Arg	Asp	Glu	Tyr	Thr	Met	Glu	Ser	Cys	Cys	Met					
			115				120								

<210> 1469

<211> 468

<212> DNA

<213> Homo sapiens

<400> 1469

nngctcgatc tagtctatgg gctaaatgat cgaccgaacc cttttattgc ttttttagcg
 60
 gcgcttcaac atcttttagc gatttttagtg ccaattgtca ccnctggatt attgatttgc
 120
 ttggcattag gcgtgtctcg cgaagacacc aatatgattc tttctatgac attaattatt
 180

tcagggatcg cgactttctt gcaatgtaaa aaagttgggc catttggcgc tggattactt
 240
 attgttcaag gaactagctt taatttcatt ggtcctatca ttggtatagg tagctcaatg
 300
 gtggctgctg gcacacctgt cgaacaagtt atggctgcga tttttgggtg cgtaatcgca
 360
 ggttcattta tcgaaatggg cgtatctcaa attttacctt gggtaaaaaa gctgattact
 420
 cctctcgta caggaatcgt cgttctgttg attggtctac cattaatg
 468

<210> 1470

<211> 156

<212> PRT

<213> Homo sapiens

<400> 1470

Xaa	Leu	Asp	Leu	Val	Tyr	Gly	Leu	Asn	Asp	Arg	Pro	Asn	Pro	Phe	Ile
1				5					10					15	
Ala	Phe	Leu	Ala	Ala	Leu	Gln	His	Leu	Leu	Ala	Ile	Leu	Val	Pro	Ile
			20					25					30		
Val	Thr	Xaa	Gly	Leu	Leu	Ile	Cys	Leu	Ala	Leu	Gly	Val	Ser	Arg	Glu
		35				40					45				
Asp	Thr	Asn	Met	Ile	Leu	Ser	Met	Ser	Leu	Ile	Ile	Ser	Gly	Ile	Ala
		50				55					60				
Thr	Phe	Leu	Gln	Cys	Lys	Lys	Val	Gly	Pro	Phe	Gly	Ala	Gly	Leu	Leu
65					70				75					80	
Ile	Val	Gln	Gly	Thr	Ser	Phe	Asn	Phe	Ile	Gly	Pro	Ile	Ile	Gly	Ile
			85					90						95	
Gly	Ser	Ser	Met	Val	Ala	Ala	Gly	Thr	Pro	Val	Glu	Gln	Val	Met	Ala
			100					105					110		
Ala	Ile	Phe	Gly	Val	Val	Ile	Ala	Gly	Ser	Phe	Ile	Glu	Met	Gly	Val
		115					120					125			
Ser	Gln	Ile	Leu	Pro	Trp	Val	Lys	Lys	Leu	Ile	Thr	Pro	Leu	Val	Thr
		130				135					140				
Gly	Ile	Val	Val	Leu	Leu	Ile	Gly	Leu	Pro	Leu	Met				
145					150					155					

<210> 1471

<211> 341

<212> DNA

<213> Homo sapiens

<400> 1471

gcgtggatgg ggatcctgaa aaacaatggc gtgctgaata acttcttgct gtggctcggc
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 gttatcgatc agccgctgac gattttgcac accaatctgg cgggtgtatat cggcattgtg
 120
 tacgcttata tgccgtttat ggtactgccc atttatacgg cgctgacgcg cattgattac
 180
 tcgctgggtgg aggctcact ggatctcggg gcccgctcgc tgaaaacggt tttcaatgtg
 240
 attgtcccgc tcaccaaagg cggcattata gcgggggtcga tgctggtgtt tatcccggcg
 300

gtcgggtgagt ttgttatccc ggaactgctc ggcggcggcc g
341

<210> 1472
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1472
Ala Trp Met Gly Ile Leu Lys Asn Asn Gly Val Leu Asn Asn Phe Leu
1 5 10 15
Leu Trp Leu Gly Val Ile Asp Gln Pro Leu Thr Ile Leu His Thr Asn
20 25 30
Leu Ala Val Tyr Ile Gly Ile Val Tyr Ala Tyr Leu Pro Phe Met Val
35 40 45
Leu Pro Ile Tyr Thr Ala Leu Thr Arg Ile Asp Tyr Ser Leu Val Glu
50 55 60
Ala Ser Leu Asp Leu Gly Ala Arg Pro Leu Lys Thr Phe Phe Asn Val
65 70 75 80
Ile Val Pro Leu Thr Lys Gly Gly Ile Ile Ala Gly Ser Met Leu Val
85 90 95
Phe Ile Pro Ala Val Gly Glu Phe Val Ile Pro Glu Leu Leu Gly Gly
100 105 110
Gly

<210> 1473
<211> 352
<212> DNA
<213> Homo sapiens

<400> 1473
tccggaactg ctcaatgtct gtccagcaca taagatccat gcttgaagaa tgagtctcaa
60
gaaactgacg gaaatgttca aactccagtt tggtgttaag cagatcacta aacttaaaat
120
gcttgatttc tgcaggaaca ttatcccaat attctgttcg tttagagacg ttagagagtg
180
ataaaaatgcc agttccaatt tcacaagtgg tgctctcagc tttcttgga aatgtctctt
240
tatgcaaagc ctgtagcttt ctgaagtatg tggagtctaa ctgtcgagtt tottccacca
300
gtccacactt tttataagca atttggtccg attttaccat ctttgtccat gg
352

<210> 1474
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1474
Met Val Lys Ser Asp Gln Ile Ala Tyr Lys Lys Val Glu Leu Val Glu
1 5 10 15
Glu Thr Arg Gln Leu Asp Ser Thr Tyr Phe Arg Lys Leu Gln Ala Leu

```

                20                25                30
His Lys Glu Thr Phe Ser Lys Lys Ala Glu Asp Thr Thr Cys Glu Ile
                35                40                45
Gly Thr Gly Ile Leu Ser Leu Ser Asn Val Ser Lys Arg Thr Glu Tyr
                50                55                60
Trp Asp Asn Val Pro Ala Glu Tyr Lys His Phe Lys Phe Ser Asp Leu
65                70                75                80
Leu Asn Asn Lys Leu Glu Phe Glu His Phe Arg Gln Phe Leu Glu Thr
                85                90                95
His Ser Ser Ser Met Asp Leu Met Cys Trp Thr Asp Ile Glu Gln Phe
                100                105                110
Arg

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<210> 1475

<211> 389

<212> DNA

<213> Homo sapiens

<400> 1475

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accggtgccg gagccgatct ccacgatggt cttggcgccg gtgcggccga accactcatc
60
gacatcgata agctcatcgc ttaagacgcg gccagctcg ggccagcatt gctcaaaaag
120
ctggtgctgg ttgtccgtga gcgtgccgcg ggggaaaggg acctttgccc aggcgcgggt
180
agtccaggtc attatcaaag accgcattga agtccgtttg cggcgggcca cccggcgcca
240
tttctccggc agggggtgtt ttgagaatta tccgtgctat acatcgcgcc ctatttttcc
300
ctgtccaggc atggcaagca atatgccgcg ccgggtatct tccccgccgt atggggaggg
360
ggataaccgg agcttgacgg ggtggtgtc
389

```

<210> 1476

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1476

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Met Val Leu Ala Pro Val Arg Pro Asn His Ser Ser Thr Ser Ile Ser
1                5                10                15
Ser Ser Leu Lys Thr Arg Pro Ser Ser Gly Gln His Cys Ser Lys Ser
                20                25                30
Trp Cys Trp Leu Ser Val Ser Val Pro Arg Gly Lys Gly Thr Phe Ala
35                40                45
Gln Ala Arg Val Val Gln Val Ile Ile Lys Asp Arg Ile Glu Val Arg
50                55                60
Leu Arg Arg Ala Thr Arg Arg His Phe Ser Gly Arg Gly Cys Phe Glu
65                70                75                80
Asn Tyr Pro Cys Tyr Thr Ser Arg Pro Ile Phe Pro Cys Pro Gly Met
85                90                95
Ala Ser Asn Met Pro Arg Arg Val Phe Ser Pro Pro Tyr Gly Glu Gly

```

100 105 110
 Asp Asn Arg Ser Leu Thr Gly Trp Cys
 115 120
 <210> 1477
 <211> 500
 <212> DNA
 <213> Homo sapiens
 <400> 1477
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 60
 ttcttccctt atttgctggg ccaaacggac ggccaacctt aagatgccca atgggcatcg
 120
 gcgctgtgtg gtattgatgc cgaaatcatc cgggcactgg cccgccaaat ggcgccaac
 180
 cgtacgcaaa tcattgcggg ctggtgcgtg caacgtatgc aacacggcga acaatgggcg
 240
 tggatgacgg tagtgctggc ggcatgctt ggccaaatcg gcttaccggg cgcggggttc
 300
 ggttttggtt ggccctccaa cggcgaggtt acccccagagc cgcaaggggt gatcctgagc
 360
 ggtttctccg gttccccgcg tacgcccggc cgccatgcc aagggggattt caaagggttac
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 agcagtacca ttccgatcgc gcgctttatc gatgccaatgc tggagccggg caaggagatc
 480
 gattggaatg gcaaacgcgt
 500

<210> 1478
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1478
 Tyr Ser Glu Asn Leu His Asp Thr His Phe Leu Lys Thr Tyr Cys Val
 1 5 10 15
 Gly Phe Glu Gln Phe Leu Pro Tyr Leu Leu Gly Gln Thr Asp Gly Gln
 20 25 30
 Pro Lys Asp Ala Gln Trp Ala Ser Ala Leu Cys Gly Ile Asp Ala Glu
 35 40 45
 Ile Ile Arg Ala Leu Ala Arg Gln Met Ala Ala Asn Arg Thr Gln Ile
 50 55 60
 Ile Ala Gly Trp Cys Val Gln Arg Met Gln His Gly Glu Gln Trp Ala
 65 70 75 80
 Trp Met Thr Val Val Leu Ala Ala Met Leu Gly Gln Ile Gly Leu Pro
 85 90 95
 Gly Gly Gly Phe Gly Phe Gly Trp Pro Ser Asn Gly Ala Gly Thr Pro
 100 105 110
 Glu Pro Gln Gly Val Ile Leu Ser Gly Phe Ser Gly Ser Pro Ala Thr
 115 120 125
 Pro Ala Arg His Ala Lys Gly Asp Phe Lys Gly Tyr Ser Ser Thr Ile
 130 135 140
 Pro Ile Ala Arg Phe Ile Asp Ala Met Leu Glu Pro Gly Lys Glu Ile

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145                      150                      155                      160
Asp Trp Asn Gly Lys Arg
                      165

<210> 1479
<211> 421
<212> DNA
<213> Homo sapiens

<400> 1479
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ttaagtatgt tctttacatt gaaacagaaa ggaaagaaga taggaaaaat ggtgccagca
120
cgctgggctt tttttgttg ctgttttggg tgggggtgtgc tagtgcagtg tccgggtgtac
180
gcttttgtcc tcaaacaggc ttgttccccg gtcagagttt cattattgtt gctggtaaac
240
aaatgccaag tttgacaaaa aacagtgaag taaagcaaaa gattttgaaa aatgcttcat
300
catgtcagaa ggaaagaacc cttttcacgg gtgcctgccc acatttcctt gccagcctg
360
agaccctatt gactttgaat tatcttttgc tgttttattt ctatgaaaat tatatacgcg
420
t
421

<210> 1480
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1480
Met Lys Ala Arg Cys Ala Ser Leu Ile Glu Ala Gly Thr Leu Lys Tyr
 1          5          10          15
Val Leu Tyr Ile Glu Thr Glu Arg Lys Glu Asp Arg Lys Asn Gly Ala
 20          25          30
Ser Thr Leu Gly Phe Phe Cys Leu Phe Trp Val Gly Cys Ala Ser
 35          40          45
Ala Val Ser Gly Val Arg Phe Cys Pro Gln Thr Gly Leu Phe Pro Gly
 50          55          60
Gln Ser Phe Ile Ile Val Ala Gly Lys Gln Met Pro Ser Leu Thr Lys
 65          70          75          80
Asn Ser Glu Ile Lys Gln Lys Ile Leu Lys Asn Ala Ser Ser Cys Gln
 85          90          95
Lys Glu Arg Thr Leu Phe Thr Gly Ala Cys Pro His Phe Leu Ala Gln
100          105          110
Pro Glu Thr Leu Leu Thr Leu Asn Tyr Leu Leu Leu Phe Tyr Phe Tyr
115          120          125
Glu Asn Tyr Ile Arg
130

<210> 1481
<211> 545

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<212> DNA

<213> Homo sapiens

<400> 1481

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 120
 agttgcgctc cctgctcgag gagatcgagg cctcaccggc ctcccactaa ctgacccggg
 180
 tcgcgacgag cgagttgtcg catcgggcca acggtgtgta gacaagtcag catgagcacc
 240
 gagaaccagc tgggtaaggc cattgccgat gcgttgtcgc acgtcaatga ccccgagatc
 300
 aaacgcccc ttaccgatct caacatgatt gatgagatta ccgctcgacg gcaaggacgc
 360
 gctttcgtcc gcatectgct gaccgtcgcc ggggtgtccc tcaagaccga gctgcgtgag
 420
 caggccaccg aggtgtgtgc cagcgttgac ggggtgacca gtgtttccgt cgaactcggc
 480
 accatgaccg acgaacagcg cgatgctctc aaagttcagc tgcgcggtga cgtccccgaa
 540
 cgcgt
 545

<210> 1482

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1482

Met	Ser	Thr	Glu	Asn	Pro	Val	Val	Lys	Ala	Ile	Ala	Asp	Ala	Leu	Ser
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His	Val	Asn	Asp	Pro	Glu	Ile	Lys	Arg	Pro	Ile	Thr	Asp	Leu	Asn	Met
		20						25					30		
Ile	Asp	Glu	Ile	Thr	Val	Asp	Glu	Gln	Gly	Arg	Ala	Phe	Val	Arg	Ile
		35					40					45			
Leu	Leu	Thr	Val	Ala	Gly	Cys	Pro	Leu	Lys	Thr	Glu	Leu	Arg	Glu	Gln
	50				55					60					
Ala	Thr	Glu	Ala	Val	Arg	Ser	Val	Asp	Gly	Val	Thr	Ser	Val	Ser	Val
65					70					75				80	
Glu	Leu	Gly	Thr	Met	Thr	Asp	Glu	Gln	Arg	Asp	Ala	Leu	Lys	Val	Gln
			85					90						95	
Leu	Arg	Gly	Asp	Val	Pro	Glu	Arg								
				100											

<210> 1483

<211> 625

<212> DNA

<213> Homo sapiens

<400> 1483

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 120
 gcatacctggc ccctggagcc tgagggccct cgagtaacac ggggtggaagt gacgatggaa
 180
 ggcggtctacg acattttgca tgatgtgtcc tgtgcactaa ggcagcccat tcgttcattg
 240
 tatcgtaccc atgttatccg gcgtttctgg aacacgctgc agagcatcaa ccagacagac
 300
 cagatgcttg cccaccttca gtccttctcc tcagtgcctg agcatttcac gcttcctgac
 360
 agcaccaaga ggggagtgcc actctttctac atccctccag gctccaccac cccgggtgctc
 420
 tccctccagc ccagtgggtc tgactcatcc catgccagc ttgctgccta ctggaagccc
 480
 agtgctgtcc atggatgcaa attcctggca gcgatggctg cacatgcac gcctgggtgct
 540
 aatcctggag catgacacac caatcccaaa gcacttgac accccgggca gcaatgggag
 600
 ctactacgga gagaagacaa cgcgt
 625

<210> 1484

<211> 184

<212> PRT

<213> Homo sapiens

<400> 1484

Val	Arg	Leu	Arg	Glu	Gly	Tyr	Ser	Val	Arg	Glu	Val	Thr	Leu	Ala	Lys
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Gly	Gly	Ser	Gln	Leu	Glu	Val	Lys	Leu	Val	Leu	Leu	Trp	Lys	His	Asn
			20					25					30		
Met	Arg	Ile	Glu	Tyr	Val	Ala	Met	Ala	Ser	Trp	Pro	Leu	Glu	Pro	Glu
		35				40					45				
Gly	Pro	Arg	Val	Thr	Arg	Val	Glu	Val	Thr	Met	Glu	Gly	Gly	Tyr	Asp
	50					55					60				
Ile	Leu	His	Asp	Val	Ser	Cys	Ala	Leu	Arg	Gln	Pro	Ile	Arg	Ser	Leu
65				70					75					80	
Tyr	Arg	Thr	His	Val	Ile	Arg	Arg	Phe	Trp	Asn	Thr	Leu	Gln	Ser	Ile
			85						90					95	
Asn	Gln	Thr	Asp	Gln	Met	Leu	Ala	His	Leu	Gln	Ser	Phe	Ser	Ser	Val
			100					105					110		
Pro	Glu	His	Phe	Thr	Leu	Pro	Asp	Ser	Thr	Lys	Ser	Gly	Val	Pro	Leu
		115					120					125			
Phe	Tyr	Ile	Pro	Pro	Gly	Ser	Thr	Thr	Pro	Val	Leu	Ser	Leu	Gln	Pro
	130					135					140				
Ser	Gly	Ser	Asp	Ser	Ser	His	Ala	Gln	Phe	Ala	Ala	Tyr	Trp	Lys	Pro
145					150					155				160	
Ser	Ala	Val	His	Gly	Cys	Lys	Phe	Leu	Ala	Ala	Met	Ala	Ala	His	Ala
			165					170						175	
Ser	Pro	Gly	Ala	Asn	Pro	Gly	Ala								
			180												

<210> 1485

<211> 2058

<212> DNA

<213> Homo sapiens

<400> 1485

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ctgttctctgc cacagtcacg acccagacta tttatcattg gtgtcagaaa cgatattttt
120
gttggcgata ttacttctga atcacctctt aaaatgtggc ataccagaac tttattgaat
180
gcctacagca atctgaaaga tgatgccaaag tccaattggg tatgggtggga ccttcctatg
240
ccagcccaga gaaaatctgc ttctgccgat ttgattgaag aaaatcctag cagcggttaag
300
tggcataccc ggaaggaaac acagcagctc ttggatatga tgactgatgt taacttagct
360
aagggttgagg ctgcaaaaaa gctatcgatc gagtctaagg aaaatgttgt agggacaatt
420
tataaaagaa ctgcgaccga tagcttttga gttaaagcgc agcgtgctga agtgcggttt
480
gatgatgttg ccggttgtct tcgcaccctt ggaggggggt caagtcggca agtcataatg
540
gtcgttgata acgggactgt aaaaacgagg ttgatctcaa gtagagaaac tgcaaggctt
600
atgggggttac ccgacgaata catattgcc aaaaattata atgaggcgta tcacttaacg
660
ggtgatggtg ttgtagtgcc ggttgtatcc cacatagcca ctcatatttt tgaccagtg
720
atggagcgtg tgtttgagga tgccggcgga ctgcttaagc aaatcgcata gcatcgtttt
780
ggcaggaaga tatgagcgtt attcctgtga aaaaggacct tcagctaaaa aaattgattg
840
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900
aagctgaatt ttatgatagc ggctctttt ggggggctat cgagcgaatt cgaggacagt
960
tctccgcgac catgcgggag aaaagaaatt tcgttaagca tgttttaaatt tacatgcagg
1020
ataacgacta cattgctgat tgggagtcgg ctggtgaatc gaatcgccat gattatatgg
1080
taactctcaa ttctgggcgc aaagctgcta ttgagctgaa aggggtgcctt gatggcaata
1140
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1200
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1260
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1320
gaacagtcgg aaggccatgc cccaaaatag caactgaacc tgagcgggct gtaacatttg
1380
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1440
gaaacaaccc gtctccaaga gctcagcaga ttgaagacgt gcagctaata aaagcgtttc
1500

acgattgttt tgggtgccgg tctgaagaag ttaatttcgt taactttgat gttggttatt
 1560
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 1620
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 1680
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 1740
 catgcacctg catgaaaacc gctacataaa gcgggcaggc gtggcgggga tacgagcgcg
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 1860
 gggtaggggt agtgagaggc agcaataaag aagcgccccg cagaatgctg ctggggcgct
 1920
 gtgagagggt gtcttggtgt cgcggtgccg tgggtcagtc gtagcgattg tcttctgtca
 1980
 gccccagcgt gtacggctca aagcggatca cttcttcgcc cagccagtca ttaagctccc
 2040
 gcagtcgctt ctgcaggc
 2058

<210> 1486

<211> 256

<212> PRT

<213> Homo sapiens

<400> 1486

Xaa	Cys	Ser	Ala	Phe	Asn	Asp	Ile	Gly	Tyr	His	Tyr	Gly	Ala	Met	Val
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Val	Asp	Ala	Ala	Leu	Phe	Leu	Pro	Gln	Ser	Arg	Pro	Arg	Leu	Phe	Ile
			20					25					30		
Ile	Gly	Val	Arg	Asn	Asp	Ile	Phe	Val	Gly	Asp	Ile	Thr	Ser	Glu	Ser
			35				40					45			
Pro	Ser	Lys	Met	Trp	His	Thr	Arg	Thr	Leu	Leu	Asn	Ala	Tyr	Ser	Asn
			50			55					60				
Leu	Lys	Asp	Asp	Ala	Lys	Ser	Asn	Trp	Val	Trp	Trp	Asp	Leu	Pro	Met
65					70				75					80	
Pro	Ala	Gln	Arg	Lys	Ser	Ala	Phe	Ala	Asp	Leu	Ile	Glu	Glu	Asn	Pro
			85					90						95	
Ser	Ser	Val	Lys	Trp	His	Thr	Arg	Lys	Glu	Thr	Gln	Gln	Leu	Leu	Asp
			100					105					110		
Met	Met	Thr	Asp	Val	Asn	Leu	Ala	Lys	Val	Glu	Ala	Ala	Lys	Lys	Leu
			115			120					125				
Ser	Ile	Glu	Ser	Lys	Glu	Asn	Val	Val	Gly	Thr	Ile	Tyr	Lys	Arg	Thr
			130			135					140				
Arg	Thr	Asp	Ser	Phe	Gly	Val	Lys	Ala	Gln	Arg	Ala	Glu	Val	Arg	Phe
145					150					155				160	
Asp	Asp	Val	Ala	Gly	Cys	Leu	Arg	Thr	Pro	Gly	Gly	Gly	Ser	Ser	Arg
			165					170						175	
Gln	Val	Ile	Met	Val	Val	Asp	Asn	Gly	Thr	Val	Lys	Thr	Arg	Leu	Ile
			180					185					190		
Ser	Ser	Arg	Glu	Thr	Ala	Arg	Leu	Met	Gly	Leu	Pro	Asp	Glu	Tyr	Ile
			195				200					205			
Leu	Pro	Lys	Asn	Tyr	Asn	Glu	Ala	Tyr	His	Leu	Thr	Gly	Asp	Gly	Val

210 215 220
 Val Val Pro Val Val Ser His Ile Ala Thr His Ile Phe Asp Pro Val
 225 230 235 240
 Met Glu Arg Val Phe Glu Asp Ala Ala Gly Leu Leu Lys Gln Ile Ala
 245 250 255

<210> 1487
 <211> 823
 <212> DNA
 <213> Homo sapiens

<400> 1487
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 60
 ccgagcaggt gacatttcag ctaaggctgg gaaggatgag gagaagtcag gaactccagg
 120
 catcagggaa tgctggggaa aaaaagcact ccaggcccag ggatcagcaa agcacaggat
 180
 gcctggggga acacacagcc tcagagcatt tgaggaacag aaaaggcaac gtgactaagc
 240
 ttcttggggc ggtgaggtca ggcagggagg tgggtgcgag gtcattggggc cgcaggcaaa
 300
 cggccctccc tcccagtgcc ccacatgcag gccctggagc accaggagcg gggaggctcc
 360
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 420
 tgggagaggc cggcagttag ggaagaatgg ccctcggtcg tgcgtagaga atgtagggga
 480
 cacagggcct ctcacggacc cagatcctga tcttgtcaga tctgcacgcc cgtgggaggg
 540
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 600
 gggacctcct tggagaacaa ggtgggggaa tttggcagct ttctcagcat ggcgtccatc
 660
 cccctacat tcctggggca cccactgtag gccaggccct gtgccggatc tgatgataca
 720
 gtgatgacta agtcacagtc cctgcctctg agggccccc atgtgtccgg gacagccaag
 780
 caacccaata tgttaaaatc cagtgtcagg acccnaggag aag
 823

<210> 1488
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 1488
 Met Leu Gly Arg Ser Cys Glu Gly Lys Phe Arg Lys Asp Leu Ser Glu
 1 5 10 15
 Gln Val Thr Phe Gln Leu Arg Leu Gly Arg Met Arg Arg Ser Gln Glu
 20 25 30
 Leu Gln Ala Ser Gly Asn Ala Gly Glu Lys Lys His Ser Arg Pro Arg
 35 40 45
 Asp Gln Gln Ser Thr Gly Cys Leu Gly Glu His Thr Ala Ser Glu His

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      50              55              60
Leu Arg Asn Arg Lys Gly Asn Val Thr Lys Leu Pro Gly Ala Val Arg
65              70              75              80
Ser Gly Arg Glu Val Gly Ala Arg Ser Trp Gly Arg Arg Gln Thr Ala
      85              90              95
Leu Pro Pro Ser Ala Pro His Ala Gly Pro Gly Ala Pro Gly Ala Gly
      100            105            110
Arg Leu Arg Gly Val Ser Ser Cys Lys Trp Pro Ala Phe Gly Ser Ile
      115            120            125
Ser Pro Phe Ser Trp Gly Leu Gly Glu Ala Gly Ser Glu Gly Arg Met
      130            135            140
Ala Leu Gly Arg Ala
145

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<210> 1489

<211> 342

<212> DNA

<213> Homo sapiens

<400> 1489

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nnccagttca ccgtcaagct ggccgcggcc ggccaacaca atgtgcgcaa tgcgctggcc
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gcgattgcct gcgccgtggg tgccggcatc aaccaggacg ccatcgtgcg cggcctcgaa
120
gccttcgccc cggtcggcgg acgtttgcag cgcaagcagg ccgccagcgg cgcgcccgtc
180
attgacgaca cccacaaccc caatcccaat tcaatgcgcc cggcgatcga cgtgctggcc
240
cgcgtacccg cgccgcgcat cctgggtggtg ggcgacatgg gcgaagtcgg cgcacaggga
300
aaagaatttc acgaagaaat cggggcttac gcacacacgc gt
342

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<210> 1490

<211> 114

<212> PRT

<213> Homo sapiens

<400> 1490

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Xaa Gln Phe Thr Val Lys Leu Ala Ala Ala Gly Glu His Asn Val Arg
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Asn Ala Leu Ala Ala Ile Ala Cys Ala Val Gly Ala Gly Ile Asn Gln
      20              25              30
Asp Ala Ile Val Arg Gly Leu Glu Ala Phe Ala Pro Val Gly Gly Arg
      35              40              45
Leu Gln Arg Lys Gln Ala Ala Ser Gly Ala Pro Val Ile Asp Asp Thr
      50              55              60
His Asn Pro Asn Pro Asn Ser Met Arg Pro Ala Ile Asp Val Leu Ala
65              70              75              80
Arg Val Pro Ala Pro Arg Ile Leu Val Val Gly Asp Met Gly Glu Val
      85              90              95
Gly Ala Gln Gly Lys Glu Phe His Glu Glu Ile Gly Ala Tyr Ala His
      100            105            110
Thr Arg

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<210> 1491
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1491
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 120
 tggggggtcag gtcccactcc caaaggagta gccatcacc acgagtcggc ggtcaatacg
 180
 attgtcgatg tcaacgaacg cctcgggggtg actccgaccg accggatatt ggggatttca
 240
 gagctaaact tcgatctatc ggtatacgac atcttcggga tgttcgcgcg ggggtgctacc
 300
 ttggtgttgc catctccagc agacaaacgt gat
 333

<210> 1492
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1492
 Met Gly Val Asp Tyr Leu Ser Ser Gln Leu Asp Trp Ala Gly Tyr Gln
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 Val Ser Thr Thr Trp Gly Ser Gly Pro Thr Pro Lys Gly Val Ala Ile
 20 25 30
 Thr His Glu Ser Ala Val Asn Thr Ile Val Asp Val Asn Glu Arg Leu
 35 40 45
 Gly Val Thr Pro Thr Asp Arg Ile Leu Gly Ile Ser Glu Leu Asn Phe
 50 55 60
 Asp Leu Ser Val Tyr Asp Ile Phe Gly Met Phe Ala Arg Gly Ala Thr
 65 70 75 80
 Leu Val Leu Pro Ser Pro Ala Asp Lys Arg Asp
 85 90

<210> 1493
 <211> 1316
 <212> DNA
 <213> Homo sapiens

<400> 1493
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 ggtgtttccc ggcagcagaa cgcggtgggc agggagaagg agctgctcag cagccagagg
 180
 gacgggcggt ttgaaggccg cccggtgccc gacggtgacg ccaagcagag atcaccaaag
 240

atgaggcaga gacccctcc tcgcccggac atgaccattc ctcgaggcct caacctgccg
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 aagccgccca tcccgcccca agtggaggaa gattattaca ccatcgccga attccagaca
 360
 accatcccag acggcatcag cttccaggca ggcctgaagg tcgaggtgat cgagaaaaac
 420
 ttgagtggct ggtggtacat tcagattgaa gataaggaag ggtgggcccc ggccaccttc
 480
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 540
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 gaagccacgg gccctcccg gccctgcct gacgcaccgc atggtgtcat ggactcgggg
 660
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 720
 atgtctgcgt cagcaggcta cgaggagatc tcagaccccg acatggagga gaagcccagc
 780
 ctccctccgc ggaaagaatc catcatcaag tcggaggggg agctgctgga gcgggagcgg
 840
 gagcggcaga ggacggagca gctccggggc cccactccca agcctccggg cgtgattttg
 900
 ccgatgatgc cagccaaaca catccctcca gcccgggaca gcaggaggcc agagcccaaa
 960
 cctgacaaaa gcagactgtt ccagctgaaa aatgacatgg ggctggagtg tggccacaag
 1020
 gtcttgccca aggaagtga gaagcccaac ctccggccca tctccaaatc caaaactgac
 1080
 ctgccagagg agaagccaga tgccactccc cagaatccct tcttgaagtc cagacctcag
 1140
 gttaggccaa aaccagctcc ttcccccaaa acggagccac ctcagggcga agaccaagt
 1200
 gacatctgca acctcaggag taagctcagg cctgccaaagt cccaagacaa gtccttggtg
 1260
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 1316

<210> 1494

<211> 438

<212> PRT

<213> Homo sapiens

<400> 1494

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Asn	Ser	Gly	Glu	Pro	Leu	Pro	Pro	Lys	Pro	Gly	Pro	Gly	Ser	Pro	Ser
			20					25					30		
His	Pro	Gly	Ala	Leu	Asp	Leu	Asp	Gly	Val	Ser	Arg	Gln	Gln	Asn	Ala
			35					40				45			
Val	Gly	Arg	Glu	Lys	Glu	Leu	Leu	Ser	Ser	Gln	Arg	Asp	Gly	Arg	Phe
			50				55				60				
Glu	Gly	Arg	Pro	Val	Pro	Asp	Gly	Asp	Ala	Lys	Gln	Arg	Ser	Pro	Lys
65					70				75					80	
Met	Arg	Gln	Arg	Pro	Pro	Pro	Arg	Arg	Asp	Met	Thr	Ile	Pro	Arg	Gly

60

ctggaggctg caaggaggat ggccccatc acggcggacc tacatgctgg gagtccggga
 120
 gagggcaggc cgcggacatg gggcatgtgg cgatgtgttt caccaccac tcccgcctga
 180
 agtgccactg tgagcccaac ccacggtgcc aggctgggct gcactccagg ctctgcagc
 240
 agaccacct cctcagcctc cttccctga aggctgggca tggcctggac aaaggtgtc
 300
 ctctctgct gtgccatgct gacgtggca
 329

<210> 1496

<211> 105

<212> PRT

<213> Homo sapiens

<400> 1496

Met	Ala	Gln	Gln	Arg	Arg	Thr	Pro	Phe	Val	Gln	Ala	Met	Pro	Ser	Leu
1				5					10					15	
Gln	Gly	Lys	Glu	Ala	Glu	Glu	Val	Gly	Leu	Leu	Gln	Glu	Pro	Gly	Val
			20					25					30		
Gln	Pro	Ser	Leu	Ala	Pro	Trp	Val	Gly	Leu	Thr	Val	Ala	Leu	Gln	Ala
		35					40					45			
Gly	Val	Gly	Gly	Glu	Thr	His	Arg	His	Met	Pro	His	Val	Arg	Gly	Leu
	50					55				60					
Pro	Ser	Pro	Gly	Leu	Pro	Ala	Cys	Arg	Ser	Ala	Val	Met	Gly	Ala	Ile
65					70				75					80	
Leu	Leu	Ala	Ala	Ser	Arg	Arg	Lys	Gln	Ser	Thr	Ala	Leu	Met	Glu	Asp
			85					90						95	
Glu	Val	Ala	Pro	Leu	Arg	Asp	Arg	Asp							
			100					105							

<210> 1497

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1497

naacttcttg cactcactca ggcgcacggt tggcggccga cttggaagcc gctgcagcac
 60
 ttgacgcggg gcgatctega agcgttcggt cttggcctga cggtcgatgg ctgcggcgtg
 120
 ccgttgatcg cgcgaatgcg acgggtgggg cagggcgtgc ggccgacacc accgcaagaa
 180
 cgcaactcac ggcagatgaa tctgttttga aacgcaagga agggtaatga caggcaccga
 240
 caagaagcgg atcccgacgc tgctgcgtgt tgagctcact gaacttaacc gcccgatcga
 300
 gcagccttac gcgcccgatg cacgtcattc tttcggggcca cgcgt
 345

<210> 1498

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1498

```

Met Thr Cys Ile Gly Arg Val Arg Leu Leu Asp Arg Ala Gly Lys Phe
 1             5             10             15
Ser Glu Leu Asn Thr Gln Gln Leu Arg Asp Pro Leu Leu Val Gly Ala
             20             25             30
Cys His Tyr Pro Ser Leu Arg Phe Lys Thr Asp Ser Ser Ala Val Ser
             35             40             45
Cys Val Leu Ala Val Val Ser Ala Ala Arg Pro Ala Pro Pro Val Ala
             50             55             60
Phe Ala Arg Ser Thr Ala Arg Arg Ser His Arg Pro Ser Gly Gln Asp
65             70             75             80
Arg Thr Leu Arg Asp Arg Pro Ala Ser Ser Ala Ala Ala Ser Lys
             85             90             95
Ser Ala Ala Asn Arg Ala Pro Glu
             100

```

<210> 1499

<211> 402

<212> DNA

<213> Homo sapiens

<400> 1499

```

aaatatattc tgccagagtt tgaacacgac accatgctct ggcatttggg catgtcgggg
60
agtttccgtc tatgcgagag caatgaagaa ttacgcaaac atgaccatct aatcattcag
120
tttgaagata tcgaactgcg ttatcatgat cctcgccggt ttggttgcat tctttggctg
180
gatgcacaat cacaaagcaa attaatagat acgctggggc cagaaccctt aagcgagaac
240
tttaatgctg agtattttatt tgaaaaattg aagaataaaa aggttggcac caaagttgca
300
attatggata accatgtggt ggtgggcgta ggcaatattt atgcgaccga aagtctgttt
360
aatctgggga ttcattccagc acaaccggcc tcgactttaa gc
402

```

<210> 1500

<211> 134

<212> PRT

<213> Homo sapiens

<400> 1500

```

Lys Tyr Ile Leu Pro Glu Phe Glu His Asp Thr Met Leu Trp His Leu
 1             5             10             15
Gly Met Ser Gly Ser Phe Arg Leu Cys Glu Ser Asn Glu Glu Leu Arg
             20             25             30
Lys His Asp His Leu Ile Ile Gln Phe Glu Asp Ile Glu Leu Arg Tyr
             35             40             45
His Asp Pro Arg Arg Phe Gly Cys Ile Leu Trp Leu Asp Ala Gln Ser
             50             55             60
Gln Ser Lys Leu Ile Asp Thr Leu Gly Pro Glu Pro Leu Ser Glu Asn

```

```

65          70          75          80
Phe Asn Ala Glu Tyr Leu Phe Glu Lys Leu Lys Asn Lys Lys Val Gly
      85          90          95
Thr Lys Val Ala Ile Met Asp Asn His Val Val Val Gly Val Gly Asn
      100          105          110
Ile Tyr Ala Thr Glu Ser Leu Phe Asn Leu Gly Ile His Pro Ala Gln
      115          120          125
Pro Ala Ser Thr Leu Ser
      130

```

```

<210> 1501
<211> 362
<212> DNA
<213> Homo sapiens

```

```

<400> 1501
nnacgcgtgc atgctgcagg catcatccat cgcgatctga agccccaaaa catcttcctg
60
gtgccgagcg cgcgcgagcg cgacttcgtg aagatcttcg acttcggcgc atgccagatg
120
gtcacaccga aggtatcgaa cggcgtgccc gagctgaaga cgagcgcggg aaatctcttc
180
ggcacggtgc cgtacatggc gccggagtgc ttcgaggacg gctcgcaccg gctggatgcg
240
cgcgcggaca tctactccac gggcatcatc atgtaccgct gcgtgacggg gacgctcccc
300
ttcaaggcga acaccgtctt cgagatgctc atccatctgc gcgagggcgc cccatcaagc
360
tt
362

```

```

<210> 1502
<211> 120
<212> PRT
<213> Homo sapiens

```

```

<400> 1502
Xaa Arg Val His Ala Ala Gly Ile Ile His Arg Asp Leu Lys Pro Gln
1          5          10          15
Asn Ile Phe Leu Val Pro Ser Ala Arg Glu Arg Asp Phe Val Lys Ile
      20          25          30
Phe Asp Phe Gly Ala Cys Gln Met Val Thr Pro Lys Val Ser Asn Gly
      35          40          45
Val Pro Glu Leu Lys Thr Ser Ala Gly Asn Leu Phe Gly Thr Val Pro
      50          55          60
Tyr Met Ala Pro Glu Cys Phe Glu Asp Gly Ser His Arg Leu Asp Ala
65          70          75          80
Arg Ala Asp Ile Tyr Ser Thr Gly Ile Ile Met Tyr Arg Cys Val Thr
      85          90          95
Gly Thr Leu Pro Phe Lys Ala Asn Thr Val Phe Glu Met Leu Ile His
      100          105          110
Leu Arg Glu Gly Arg Pro Ser Ser
      115          120

```


<210> 1503
 <211> 623
 <212> DNA
 <213> Homo sapiens

<400> 1503
 gccggcgtga ggcagagaaa cgtcctcgcc ctgtcattcc accctgaaga gactgacgac
 60
 gaccgggtac accgcacctg gttgcgccag gtgtctgagg aggtctgaca gttaccgcaa
 120
 gggctcatga cgacccctcc tgaacactgt tcaaagggcg acggcttacc attcctcgct
 180
 gtgagtcttg aacagcagct tctcgaatat gaccgacgtc atgtctggca cccctacgcc
 240
 ccgacgatcg gggcagaccc aatgcttgca gtgacggctg ccaacggagt ctggctgcag
 300
 ctgcatgatg gggaacaccg ccacgaggtc atcgatgcga tggcctcgtg gtggtgccag
 360
 attcacggtt accgaaaccc ggtcctcgac gaggccctca accgtcaaag ctcccagttc
 420
 agtcacgtca tgtttggcgg actcaccat aaggccgcgg ttgacgccgt catatcccta
 480
 gtgcgcctgg ccccgggggc cctcgaccgg atcttctctg ctgattccgg gtctgtcggc
 540
 gtcgaggtga gtctcaaatt ggctcgtcag gtgcaaactg ctcgcaccgc agcgcgcggc
 600
 ggcactttga cgaggacacg cgt
 623

<210> 1504
 <211> 165
 <212> PRT
 <213> Homo sapiens

<400> 1504
 Met Thr Thr Pro Pro Glu His Cys Ser Lys Gly Asp Gly Leu Pro Phe
 1 5 10 15
 Leu Ala Val Ser Pro Glu Gln Gln Leu Leu Glu Tyr Asp Arg Arg His
 20 25 30
 Val Trp His Pro Tyr Ala Pro Thr Ile Gly Ala Asp Pro Met Leu Ala
 35 40 45
 Val Thr Ala Ala Asn Gly Val Trp Leu Gln Leu His Asp Gly Glu His
 50 55 60
 Arg His Glu Val Ile Asp Ala Met Ala Ser Trp Trp Cys Gln Ile His
 65 70 75 80
 Gly Tyr Arg Asn Pro Val Leu Asp Glu Ala Leu Asn Arg Gln Ser Ser
 85 90 95
 Gln Phe Ser His Val Met Phe Gly Gly Leu Thr His Lys Ala Ala Val
 100 105 110
 Asp Ala Val Ile Ser Leu Val Arg Leu Ala Pro Gly Pro Leu Asp Arg
 115 120 125
 Ile Phe Leu Ala Asp Ser Gly Ser Val Gly Val Glu Val Ser Leu Lys
 130 135 140
 Leu Ala Arg Gln Val Gln Ile Ala Arg Thr Ala Ala Arg Gly Gly Thr

1244

130 135 140
 Gly Gln Leu Ala Asp Gly Ile Asp Gln Phe Thr Gly Asn Leu Val Gly
 145 150 155 160
 Tyr Arg Thr Glu Ile Arg Gln Tyr Ala
 165

<210> 1507
 <211> 667
 <212> DNA
 <213> Homo sapiens

<400> 1507
 agatctcttta agatgtgctc attatcatga gaacagcgtg gaggaaacca cccccaggat
 60
 ccagttacct ccacttgtcc tgccttggc acgtggggct tatggggatt acaattcaag
 120
 gtgagacttg ggtggggaca cagtggaaca tgaagtgtgc cacgctgggt ggatgacgcc
 180
 ctctccccc cgccaccgag agctgcaggc cacatgattc cttttgggta gcactcggga
 240
 aagggcagaa tgtacaggaa cagagtgaga ttcgcagggc ctggggctga gggaggggac
 300
 gcactagagg aaggcaaagg ggagcctcct ggggtgtgggg agcactttct gtcttggtt
 360
 tgggtggtggc tgcacagtgg cccacaccgc tcagagctca cctgcctgca cccaggccct
 420
 ccgtgcaccc tggcagccca gatgactgca ccagcccagg ggaggtggag gaatgccaca
 480
 cgaccggta cctggggacc gggggctctc ggtgatcatc ccgagctcca agacagaagc
 540
 tggactacag ccgtgctgag tggaggggtt tgggtggtgg gtgcccgcct cctattgctc
 600
 ctgcagactc tgggggtctc ggcgccccca gtggggcaat gtgggctgct gcagggaact
 660
 cacgcgt
 667

<210> 1508
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1508
 Met Tyr Arg Asn Arg Val Arg Phe Ala Gly Pro Gly Ala Glu Gly Gly
 1 5 10 15
 Asp Ala Leu Glu Gly Lys Gly Glu Pro Pro Gly Cys Gly Glu His
 20 25 30
 Phe Leu Ser Trp Phe Trp Trp Trp Leu His Ser Gly Pro His Pro Ser
 35 40 45
 Glu Leu Thr Cys Leu His Pro Gly Pro Pro Cys Thr Leu Ala Ala Gln
 50 55 60
 Met Thr Ala Pro Ala Gln Gly Arg Trp Arg Asn Ala Thr Arg Thr Gly
 65 70 75 80
 Thr Trp Gly Pro Gly Val Leu Gly Asp His Pro Glu Leu Gln Asp Arg

```

      85              90              95
Ser Trp Thr Thr Ala Val Leu Ser Gly Gly Val Trp Trp Leu Gly Ala
      100              105              110
Arg Leu Leu Leu Leu Leu Gln Thr Leu Gly Ser Arg Ala Pro Pro Val
      115              120              125
Gly Gln Cys Gly Leu Leu Gln Gly Thr His Ala
      130              135

```

<210> 1509
 <211> 463
 <212> DNA
 <213> Homo sapiens

```

<400> 1509
tgatcagagt ggctgagcaa cttgctcaag atcacagttt cagaagtacg ctctaagctg
60
ggtctggctg actccaaagt tgtggctttt gttggttttc ttgttctgtc gcgttttaga
120
aagggctagg aaccgagcac tgggcgttgg gcttactctc ctctatggt gacctgggag
180
tggtgcccaa ggcgtctct tccagcacc tcagggtcct cactggtaaa ggagggagtg
240
attggaatgt cgccaaagtt acttggctct ggaattctgt ggctattcac gtggactctg
300
gatggcggtc accaagtaga agagggggccc tgggatagag agaagtctcc tctctgctc
360
ctgatttccc aggctctcc ctctctggc cctccctcct ttcttccact tccccggatt
420
cccttcgagt ttggttgcaa ctttaatttt nngttccgat tca
463

```

<210> 1510
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1510
Met Val Thr Trp Glu Trp Cys Pro Arg Arg Ser Leu Pro Ser Thr Ser
1      5      10      15
Gly Ser Ser Leu Val Lys Glu Gly Val Ile Gly Met Ser Pro Lys Leu
20     25     30
Leu Gly Ser Gly Ile Leu Trp Leu Phe Thr Trp Thr Leu Asp Gly Gly
35     40     45
His Gln Val Glu Glu Gly Pro Trp Asp Arg Glu Lys Ser Pro Leu Leu
50     55     60
Leu Leu Ile Ser Gln Ala Ser Pro Ser Pro Gly Pro Pro Ser Phe Leu
65     70     75     80
Pro Leu Pro Arg Ile Pro Phe Glu Phe Gly Cys Asn Phe Asn Phe Xaa
85     90     95
Phe Arg Phe

```

<210> 1511
 <211> 633

<212> DNA

<213> Homo sapiens

<400> 1511

```

gccggcaccg gcgtcaaggc catggcgctg ggcccgggat ggggtacacac cgaattccac
60
tcacgcgcca acgtcaccgg caaccatctg ccggactttt tctggatcga cgccgaagtt
120
ctggtaacgg aggtctctcaa cgaccttgac catgacaagg tagtatccat tcctaccccg
180
ctctggaagt tcttcacgc agtggccaca catacccccac gtcccgctat gagattcctg
240
tcacgaactc tgtcctcgtc tcgagacaag gacgaccatc ctcgacacac tccgggaggg
300
gaggcctgag atggccagcg tcaaaccac taaggaccgg ggccggtaca ccaatgatct
360
gtccgccggc acgcggcagg cagcgaacat gcttctgctg cgtcctttgg tgtggaaagt
420
cgtcaaagtg agcgtccacg gagccgacaa cctcgacggg ctcgacggtg ccttacgctg
480
ccgtcgctaa ccattcctcc cacctcgacg cgccgctcgt ttttggggcc cttcccaagc
540
ggctgtcaaa gtacctagct accgggggccg ctgctgacta tttcttcacc gtctggtgga
600
aggccatcgc tccggtgctc ttcttcaacg cgt
633

```

<210> 1512

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1512

```

Ala Gly Thr Gly Val Lys Ala Met Ala Leu Gly Pro Gly Trp Val His
 1             5             10             15
Thr Glu Phe His Ser Arg Ala Asn Val Thr Gly Asn His Leu Pro Asp
      20             25             30
Phe Phe Trp Ile Asp Ala Glu Val Leu Val Arg Glu Ala Leu Asn Asp
      35             40             45
Leu Asp His Asp Lys Val Val Ser Ile Pro Thr Pro Leu Trp Lys Phe
      50             55             60
Phe Ile Ala Val Ala Thr His Thr Pro Arg Ser Ala Met Arg Phe Leu
      65             70             75             80
Ser Arg Thr Leu Ser Ser Ser Arg Asp Lys Asp Asp His Pro Arg His
      85             90             95
Thr Pro Gly Gly Glu Ala
      100

```

<210> 1513

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1513

acgcgtgaag ggggtggaatt tcaccacaga ggggacgccg ggggttcctgt tcagaaatat
 60
 ttggtcgtcc aatctcgtaa tgcccttctg aatgacttgc tgggcctgcc tcctgacacg
 120
 gctgtttcgc aggaaccgcc actcccgtc cttgcggatc tgactctcca ggctgtgctc
 180
 ttctgggata ttcattgacgg gctgggtaaa atagccgggc gctccagtcg cagaaccccg
 240
 tctgcaccgt ggcggagatg aaacttttgt gtccagcagc atcgcccgcg tcgtccgcag
 300
 tctgctctgg gcccttctcg aacatcttcc gtgtccgggg gaactggtgg gaggtagggg
 360
 tgtactgcgc cccagcgggg cctgtggtgc ccggccggcc g
 401

<210> 1514

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1514

Met	Phe	Asp	Lys	Gly	Pro	Glu	Gln	Thr	Ala	Asp	Asp	Ala	Asp	Asp	Ala
1				5					10					15	
Ala	Gly	His	Lys	Ser	Phe	Ile	Ser	Ala	Thr	Val	Gln	Thr	Gly	Phe	Cys
			20					25					30		
Asp	Trp	Ser	Ala	Arg	Leu	Phe	Tyr	Pro	Ala	Arg	His	Glu	Asp	Pro	Arg
		35					40					45			
Arg	Ala	Arg	Pro	Gly	Glu	Ser	Asp	Pro	Gln	Gly	Ala	Gly	Val	Ala	Val
	50					55					60				
Pro	Ala	Lys	Gln	Pro	Cys	Gln	Glu	Ala	Gly	Pro	Ala	Ser	His	Ser	Glu
65					70				75					80	
Gly	His	Tyr	Glu	Ile	Gly	Arg	Pro	Asn	Ile	Ser	Glu	Gln	Glu	Pro	Arg
			85					90						95	
Arg	Pro	Leu	Cys	Gly	Glu	Ile	Pro	Pro	Leu	His	Ala				
			100					105							

<210> 1515

<211> 720

<212> DNA

<213> Homo sapiens

<400> 1515

nnggatcctg accgcggcat gaggttcaac cctgccaaagc tattgctcga cccttatgcc
 60
 agggccatca cggcaggagt cgattatcac ggcccagatta tggaccacac gccggaatcc
 120
 aactacgagc ctgacctgac cgacgatgcg acgtcgggtcc cgctcgccgt cgtcattgac
 180
 gatccccgcc cgcctacgcc tattgcgcgc cgccacgaca tcagcgaatc gggcatctat
 240
 gagacccatg tcaaagggct aaccgcctt caccocctcg ttcttgagca tcttcgcagc
 300
 acctatgccg ggcttgcccta tccggctgtt atcgaacacc tcaagtcaat cggagtaaca
 360

gccatcgaac tactaccgt ccagcagttc gtctccgaac cattcatcgt tgggcgcggc
 420
 ttatccgatt actgggggta caacaccctg ggggtctttg cgccgcatgc tgcctactgc
 480
 tccgtcggct cgatgggaac ccaggtgcgc gagttcaagg acatgggtgac gtctttccac
 540
 gaagccggca tcgaggtttt cctcgatgtc gtctacaacc aactgggtga gggcggccat
 600
 gaaggaccga ctctgtcttt ccgcggcacc gatcacgagt cttattaccg cctcaccaac
 660
 gatcaccgca atgactatga cgtcaccggt tgtggcaatt ctgtcgacac ctcccatccg
 720

<210> 1516

<211> 240

<212> PRT

<213> Homo sapiens

<400> 1516

Xaa	Asp	Pro	Asp	Arg	Gly	Met	Arg	Phe	Asn	Pro	Ala	Lys	Leu	Leu	Leu
1				5					10				15		
Asp	Pro	Tyr	Ala	Arg	Ala	Ile	Thr	Ala	Gly	Val	Asp	Tyr	His	Gly	Pro
			20					25					30		
Ile	Met	Asp	His	Thr	Pro	Glu	Ser	Asn	Tyr	Glu	Pro	Asp	Leu	Thr	Asp
		35					40					45			
Asp	Ala	Thr	Ser	Val	Pro	Leu	Ala	Val	Val	Ile	Asp	Asp	Pro	Gly	Pro
	50					55				60					
Pro	Thr	Pro	Ile	Ala	Arg	Arg	His	Asp	Ile	Ser	Glu	Ser	Gly	Ile	Tyr
65				70					75					80	
Glu	Thr	His	Val	Lys	Gly	Leu	Thr	Arg	Leu	His	Pro	Leu	Val	Pro	Glu
			85						90					95	
His	Leu	Arg	Ser	Thr	Tyr	Ala	Gly	Leu	Ala	Tyr	Pro	Ala	Val	Ile	Glu
		100					105						110		
His	Leu	Lys	Ser	Ile	Gly	Val	Thr	Ala	Ile	Glu	Leu	Leu	Pro	Val	Gln
		115					120					125			
Gln	Phe	Val	Ser	Glu	Pro	Phe	Ile	Val	Gly	Arg	Gly	Leu	Ser	Asp	Tyr
	130					135					140				
Trp	Gly	Tyr	Asn	Thr	Leu	Gly	Phe	Phe	Ala	Pro	His	Ala	Ala	Tyr	Cys
145				150					155					160	
Ser	Val	Gly	Ser	Met	Gly	Thr	Gln	Val	Arg	Glu	Phe	Lys	Asp	Met	Val
			165						170					175	
Thr	Ser	Phe	His	Glu	Ala	Gly	Ile	Glu	Val	Phe	Leu	Asp	Val	Val	Tyr
		180					185						190		
Asn	His	Thr	Gly	Glu	Gly	Gly	His	Glu	Gly	Pro	Thr	Leu	Ser	Phe	Arg
		195				200						205			
Gly	Ile	Asp	His	Glu	Ser	Tyr	Arg	Leu	Thr	Asn	Asp	His	Arg	Asn	
	210					215				220					
Asp	Tyr	Asp	Val	Thr	Gly	Cys	Gly	Asn	Ser	Val	Asp	Thr	Ser	His	Pro
225					230					235					240

<210> 1517

<211> 497

<212> DNA

<213> Homo sapiens

<400> 1517

nnacgcgtga aggggggttcg ggaggaggac gccctgctgg agaacgggag ccagagcaac
 60
 gaaagtgacg acgtcagcac agaccgtggc cctgcgccac cttccccgct caaggagacc
 120
 tccttttcca tcgggctgca agtactgttt ccattcctcc tggcaggctt tgggaccgtg
 180
 gctgctggca tgggtgttga catcgtgcag cactgggaag tcttccagaa ggtgacagag
 240
 gtcttcatcc tagtgctgc gctgctgggg ctcaaaggga acctggaaat gacctggca
 300
 tcaaggcttt ccactgcagc caacattgga cacatggaca cacccaagga gctctggcgg
 360
 atgatcactg ggaacatggc cctcatccag gtgcaggccc cgggtggtggg cttcctggcg
 420
 tccatcgcag ccgtcgtctt tggtggatc cctgatggcc acttcagtat tccgcacgcc
 480
 ttctgctct gtggtag
 497

<210> 1518

<211> 165

<212> PRT

<213> Homo sapiens

<400> 1518

Xaa	Arg	Val	Lys	Gly	Val	Arg	Glu	Glu	Asp	Ala	Leu	Leu	Glu	Asn	Gly
1				5					10					15	
Ser	Gln	Ser	Asn	Glu	Ser	Asp	Asp	Val	Ser	Thr	Asp	Arg	Gly	Pro	Ala
			20					25					30		
Pro	Pro	Ser	Pro	Leu	Lys	Glu	Thr	Ser	Phe	Ser	Ile	Gly	Leu	Gln	Val
		35					40					45			
Leu	Phe	Pro	Phe	Leu	Leu	Ala	Gly	Phe	Gly	Thr	Val	Ala	Ala	Gly	Met
	50					55				60					
Val	Leu	Asp	Ile	Val	Gln	His	Trp	Glu	Val	Phe	Gln	Lys	Val	Thr	Glu
65					70					75				80	
Val	Phe	Ile	Leu	Val	Pro	Ala	Leu	Leu	Gly	Leu	Lys	Gly	Asn	Leu	Glu
			85						90				95		
Met	Thr	Leu	Ala	Ser	Arg	Leu	Ser	Thr	Ala	Ala	Asn	Ile	Gly	His	Met
			100					105					110		
Asp	Thr	Pro	Lys	Glu	Leu	Trp	Arg	Met	Ile	Thr	Gly	Asn	Met	Ala	Leu
		115					120					125			
Ile	Gln	Val	Gln	Ala	Pro	Val	Val	Gly	Phe	Leu	Ala	Ser	Ile	Ala	Ala
	130					135					140				
Val	Val	Phe	Gly	Trp	Ile	Pro	Asp	Gly	His	Phe	Ser	Ile	Pro	His	Ala
145					150					155					160
Phe	Leu	Leu	Cys	Gly											
				165											

<210> 1519

<211> 2076

<212> DNA

<213> Homo sapiens


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<400> 1519
nnagatcttt gggggattca acgagtggaa aatgcacgat ttctttcacc agaagaaaat
60
gtgtgcaatg agatgttggg aaaatcccag tttgttgctt gtatggctac ttgtcattca
120
cttacaaaaa ttgaaggagt gctctctggg gatccacttg atctgaaaat gtttgaggct
180
attggatgga ttctggaaga agcaactgaa gaagaaacag cacttcataa tcgaattatg
240
cccacagtgg ttcgtctctc caaacaactg cttcctgaat ctaccctgc aggaaaccaa
300
gaaatggagc tgtttgaact tccagctact tatgagatag gaattgttcg ccagttccca
360
ttttcttctg ctttgcaacg tatgagtgtg gttgccaggg tgctggggga taggaaaatg
420
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1560

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gtcaaacagc aaccttggtg tgaagtgtgg catccaaaat cagatgcttg taatacaaca
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<210> 1520

<211> 692

<212> PRT

<213> Homo sapiens

<400> 1520

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Pro	Glu	Glu	Asn	Val	Cys	Asn	Glu	Met	Leu	Val	Lys	Ser	Gln	Phe	Val
			20					25					30		
Ala	Cys	Met	Ala	Thr	Cys	His	Ser	Leu	Thr	Lys	Ile	Glu	Gly	Val	Leu
		35					40					45			
Ser	Gly	Asp	Pro	Leu	Asp	Leu	Lys	Met	Phe	Glu	Ala	Ile	Gly	Trp	Ile
	50					55				60					
Leu	Glu	Glu	Ala	Thr	Glu	Glu	Glu	Thr	Ala	Leu	His	Asn	Arg	Ile	Met
65					70				75					80	
Pro	Thr	Val	Val	Arg	Pro	Pro	Lys	Gln	Leu	Leu	Pro	Glu	Ser	Thr	Pro
				85				90						95	
Ala	Gly	Asn	Gln	Glu	Met	Glu	Leu	Phe	Glu	Leu	Pro	Ala	Thr	Tyr	Glu
			100					105					110		
Ile	Gly	Ile	Val	Arg	Gln	Phe	Pro	Phe	Ser	Ser	Ala	Leu	Gln	Arg	Met
	115					120					125				
Ser	Val	Val	Ala	Arg	Val	Leu	Gly	Asp	Arg	Lys	Met	Asp	Ala	Tyr	Met
	130					135					140				
Lys	Gly	Ala	Pro	Glu	Ala	Ile	Ala	Gly	Leu	Cys	Lys	Pro	Glu	Thr	Val
145				150					155					160	
Pro	Val	Asp	Phe	Gln	Asn	Val	Leu	Glu	Asp	Phe	Thr	Lys	Gln	Gly	Phe
			165					170					175		
Arg	Val	Ile	Ala	Leu	Ala	His	Arg	Lys	Leu	Glu	Ser	Lys	Leu	Thr	Trp
			180					185					190		
His	Lys	Val	Gln	Asn	Ile	Ser	Arg	Asp	Ala	Ile	Glu	Asn	Asn	Met	Asp
	195					200					205				
Phe	Met	Gly	Leu	Ile	Ile	Met	Gln	Asn	Lys	Leu	Lys	Gln	Glu	Thr	Pro
	210					215					220				
Ala	Val	Leu	Glu	Asp	Leu	His	Lys	Ala	Asn	Ile	Arg	Thr	Val	Met	Val

225					230					235				240
Thr	Gly	Asp	Ser	Met	Leu	Thr	Ala	Val	Ser	Val	Ala	Arg	Asp	Cys Gly
				245					250					255
Met	Ile	Leu	Pro	Gln	Asp	Lys	Val	Ile	Ile	Ala	Glu	Ala	Leu	Pro Pro
			260					265					270	
Lys	Asp	Gly	Lys	Val	Ala	Lys	Ile	Asn	Trp	His	Tyr	Ala	Asp	Ser Leu
	275						280					285		
Thr	Gln	Cys	Ser	His	Pro	Ser	Ala	Ile	Asp	Pro	Glu	Ala	Ile	Pro Val
	290						295				300			
Lys	Leu	Val	His	Asp	Ser	Leu	Glu	Asp	Leu	Gln	Met	Thr	Arg	Tyr His
305					310					315				320
Phe	Ala	Met	Asn	Gly	Lys	Ser	Phe	Ser	Val	Ile	Leu	Glu	His	Phe Gln
			325						330				335	
Asp	Leu	Val	Pro	Lys	Leu	Met	Leu	His	Gly	Thr	Val	Phe	Ala	Arg Met
		340						345					350	
Ala	Pro	Asp	Gln	Lys	Thr	Gln	Leu	Ile	Glu	Ala	Leu	Gln	Asn	Val Asp
	355						360					365		
Tyr	Phe	Val	Gly	Met	Cys	Gly	Asp	Gly	Ala	Asn	Asp	Cys	Gly	Ala Leu
	370					375					380			
Lys	Arg	Ala	His	Gly	Gly	Ile	Ser	Leu	Ser	Glu	Leu	Glu	Ala	Ser Val
385					390					395				400
Ala	Ser	Pro	Phe	Thr	Ser	Lys	Thr	Pro	Ser	Ile	Ser	Cys	Val	Pro Asn
			405						410				415	
Leu	Ile	Arg	Glu	Gly	Arg	Ala	Ala	Leu	Ile	Thr	Ser	Phe	Cys	Val Phe
		420						425				430		
Lys	Phe	Met	Ala	Leu	Tyr	Ser	Ile	Ile	Gln	Tyr	Phe	Ser	Val	Thr Leu
	435						440				445			
Leu	Tyr	Ser	Ile	Leu	Ser	Asn	Leu	Gly	Asp	Phe	Gln	Phe	Leu	Phe Ile
	450					455					460			
Asp	Leu	Ala	Ile	Ile	Leu	Val	Val	Val	Phe	Thr	Met	Ser	Leu	Asn Pro
465					470					475				480
Ala	Trp	Lys	Glu	Leu	Val	Ala	Gln	Arg	Pro	Pro	Ser	Gly	Leu	Ile Ser
			485						490				495	
Gly	Ala	Leu	Leu	Phe	Ser	Val	Leu	Ser	Gln	Ile	Ile	Ile	Cys	Ile Gly
		500						505				510		
Phe	Gln	Ser	Leu	Gly	Phe	Phe	Trp	Val	Lys	Gln	Gln	Pro	Trp	Tyr Glu
	515						520					525		
Val	Trp	His	Pro	Lys	Ser	Asp	Ala	Cys	Asn	Thr	Thr	Gly	Ser	Gly Phe
	530					535					540			
Trp	Asn	Ser	Ser	His	Val	Asp	Asn	Glu	Thr	Glu	Leu	Asp	Glu	His Asn
545					550					555				560
Ile	Gln	Asn	Tyr	Glu	Asn	Thr	Thr	Val	Phe	Phe	Ile	Ser	Ser	Phe Gln
			565						570				575	
Tyr	Leu	Ile	Val	Ala	Ile	Ala	Phe	Ser	Lys	Gly	Lys	Pro	Phe	Arg Gln
		580						585				590		
Pro	Cys	Tyr	Lys	Asn	Tyr	Phe	Phe	Val	Phe	Ser	Val	Ile	Phe	Leu Tyr
	595						600				605			
Ile	Phe	Ile	Leu	Phe	Ile	Met	Leu	Tyr	Pro	Val	Ala	Ser	Val	Asp Gln
	610					615					620			
Val	Leu	Gln	Ile	Val	Cys	Val	Pro	Tyr	Gln	Trp	Arg	Val	Thr	Met Leu
625					630					635				640
Ile	Ile	Val	Leu	Val	Asn	Ala	Phe	Val	Ser	Ile	Thr	Val	Glu	Asn Phe
			645						650				655	
Phe	Leu	Asp	Met	Val	Leu	Trp	Lys	Val	Val	Phe	Asn	Arg	Asp	Lys Gln

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 675 680 685
 Arg Trp Gly Lys
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<210> 1521
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1521
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 120
 gcgtaccatc cgatacacgc cagccttgac tgctgataca cccagccac tgcgcatcag
 180
 tgatttcaat ggcgggttaca cagtctggta tcggactgtc gatatcatcg taataggcga
 240
 tcacattccc atttgcacgc tatgtctgca acttttgacc catgattatt atttcccga
 300
 tgcaaaccac taaacagtgt tggcgcttga tgaatagccg ttctgcacca cggcggtaga
 360
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 373

<210> 1522
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1522
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 1 5 10 15
 Tyr Tyr Asp Asp Ile Asp Ser Pro Ile Pro Asp Cys Val Thr Ala Ile
 20 25 30
 Glu Ile Thr Asp Ala Gln Trp Leu Gly Cys Ile Ser Ser Gln Gly Trp
 35 40 45
 Arg Val Ser Asp Gly Thr Leu Val Ala Pro Val Pro Pro Thr Phe Ala
 50 55 60
 Glu Leu Leu Val Glu Ala Gln Arg Val Gln Thr Gln Val Ile Asp Ser
 65 70 75 80
 Ala Cys Ala Ser Ala Ile Thr Ala Gly Phe Ser Cys Asp Ala
 85 90

<210> 1523
 <211> 525
 <212> DNA
 <213> Homo sapiens

<400> 1523
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 120
 aatatgcaag aagcatcgac tcagctggaa gactctctcc tggggaagat gctggagacg
 180
 tgtggagatg ctgagaatca gctggctctc gagctctccc agcacgaagt ctttgttgag
 240
 aaggagatcg tggaccctct gtacggcata gctgaggtgg agattcccaa catccagaag
 300
 cagaggaagc agcttgcaag attggtgtta gactgggatt cagtcagagc caggtggaac
 360
 caagctcaca aatcctcagg aaccaacttt caggggcttc catcaaaaat agatactcta
 420
 aaggaaggga tggatgaagc tggaaataaa gtagaacagt gcaaggatca acttcagca
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 gacatgtaca actttatggc caaagaaggg gagtatggca aattt
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<210> 1524

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1524

Xaa	Arg	Val	Arg	Ser	Ile	Cys	Arg	His	Ser	His	Lys	Arg	Leu	Val	Ala
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Cys	Phe	Gln	Gly	Gln	His	Gly	Thr	Asp	Ala	Glu	Arg	Arg	His	Lys	Lys
		20						25					30		
Leu	Pro	Leu	Thr	Ala	Leu	Ala	Gln	Asn	Met	Gln	Glu	Ala	Ser	Thr	Gln
		35					40					45			
Leu	Glu	Asp	Ser	Leu	Leu	Gly	Lys	Met	Leu	Glu	Thr	Cys	Gly	Asp	Ala
	50					55					60				
Glu	Asn	Gln	Leu	Ala	Leu	Glu	Leu	Ser	Gln	His	Glu	Val	Phe	Val	Glu
65				70						75				80	
Lys	Glu	Ile	Val	Asp	Pro	Leu	Tyr	Gly	Ile	Ala	Glu	Val	Glu	Ile	Pro
			85					90						95	
Asn	Ile	Gln	Lys	Gln	Arg	Lys	Gln	Leu	Ala	Arg	Leu	Val	Leu	Asp	Trp
		100					105						110		
Asp	Ser	Val	Arg	Ala	Arg	Trp	Asn	Gln	Ala	His	Lys	Ser	Ser	Gly	Thr
		115				120						125			
Asn	Phe	Gln	Gly	Leu	Pro	Ser	Lys	Ile	Asp	Thr	Leu	Lys	Glu	Gly	Met
	130					135					140				
Asp	Glu	Ala	Gly	Asn	Lys	Val	Glu	Gln	Cys	Lys	Asp	Gln	Leu	Ala	Ala
145				150					155					160	
Asp	Met	Tyr	Asn	Phe	Met	Ala	Lys	Glu	Gly	Glu	Tyr	Gly	Lys	Phe	
			165					170						175	

<210> 1525

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1525

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 120
 ctgcgttctt ccttggaacta tgaatatgaa ctgccgatgg cccagatgaa ccggcggttta
 180
 tctggcatcg atacgggtctt tttgcttacc gatgaaaagt acggctacat cagctcatcg
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 294

<210> 1526

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1526

Val	His	Glu	Arg	Met	Asp	Leu	Ile	Arg	Gln	Ser	Val	Asp	Ala	Arg	Ile
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Asn	Val	Asp	Tyr	Trp	Ser	Gly	Leu	Leu	Val	Asp	Tyr	Thr	Ser	Gln	His
			20				25					30			
Gly	Val	Asp	Val	Leu	Val	Lys	Gly	Leu	Arg	Ser	Ser	Leu	Asp	Tyr	Glu
		35				40						45			
Tyr	Glu	Leu	Pro	Met	Ala	Gln	Met	Asn	Arg	Arg	Leu	Ser	Gly	Ile	Asp
		50				55					60				
Thr	Val	Phe	Leu	Leu	Thr	Asp	Glu	Lys	Tyr	Gly	Tyr	Ile	Ser	Ser	Ser
65					70					75				80	
Leu	Cys	Lys	Gln	Val	Ala	Gln	Phe	Gly	Gly	Glu	Val	Thr	Gly	Met	Leu
			85					90						95	

Arg Ile

<210> 1527

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1527

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 120
 acttcgccct ggtgcacggg gttggcatga ccggcgagta cccttgggtg gtgcaccgcg
 180
 aagacattga cgcgctgggt tacgacgggtg tgttcgaggc cggcatgacc atctgtgtgg
 240
 aaagctacat cggccacgac gacggcgggc aaggcgtgaa gtcgaagaa cagatctaca
 300
 tccacgaaca cagcatcgag ttgctctccg attatccgtt cgaccacgc ctgttgccgc
 360
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 371

<210> 1528

<211> 109

<212> PRT

<213> Homo sapiens

<400> 1528

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Met Glu Met Leu Lys Ala Gly Arg Ser Phe Lys Glu Tyr Ala Glu Met
 1           5           10           15
Ala Trp Lys Ile Pro Glu His Tyr Lys Asn Asn Arg Tyr Phe Ala Leu
 20           25           30
Val His Gly Val Gly Met Thr Gly Glu Tyr Pro Trp Val Val His Arg
 35           40           45
Glu Asp Ile Asp Ala Leu Gly Tyr Asp Gly Val Phe Glu Ala Gly Met
 50           55           60
Thr Ile Cys Val Glu Ser Tyr Ile Gly His Asp Asp Gly Gly Glu Gly
65           70           75           80
Val Lys Leu Glu Glu Gln Ile Tyr Ile His Glu His Ser Ile Glu Leu
 85           90           95
Leu Ser Asp Tyr Pro Phe Asp Pro Arg Leu Leu Pro Arg
 100          105

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<210> 1529

<211> 609

<212> DNA

<213> Homo sapiens

<400> 1529

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naccgctgggt gctcaccctc cgtgtgactc gcgctctgtc cggtcaggg ctgcacctcc
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gtgggacttg cgctctgtcc ggctcagggc tcgacctccg tgggacttgc gctctgtccg
120
gctcaggggt cgcctccgt gggacttgcg ctctgtccgg ctccagggctc gccctccgtg
180
ggacttgccg tctgtccggc tcagggctcg cctccgtgg gacttgccgt ctgtccggct
240
cagggctcgc cctccgtggg acttgccgtc tgtccggctc agggctcgcc ctccgtggga
300
tttgcgtct gtctggctca ggctgcgag ggcaatggag gaacctccg agcaggccca
360
gcggctcctt ccaccagcc cccatctccg gccggccatt tgtgaggccc tctgccactg
420
aggtgcactg tttccaattc ctcatcaca agctctacct tccacgagcc cagagcatga
480
acgcattcgg ccattggtct caccactctg cgaggagcac agcctcttct ccaccgtcca
540
atagcgtgtt cctcctttcc caggcctcac agaattgtct gtccgcatcc tcccagcatt
600
ccattcacg
609

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<210> 1530

<211> 125

<212> PRT

<213> Homo sapiens

<400> 1530

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Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu

```

1	5	10	15
Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala			
	20	25	30
Gln Gly Ser Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser			
	35	40	45
Pro Ser Val Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val			
	50	55	60
Gly Leu Ala Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Leu Ala			
65	70	75	80
Leu Cys Pro Ala Gln Gly Ser Pro Ser Val Gly Phe Ala Leu Cys Leu			
	85	90	95
Ala Gln Ala Ala Gln Gly Asn Gly Gly Thr Ser Arg Ala Gly Pro Ala			
	100	105	110
Ala Pro Ser Thr Gln Pro Pro Ser Pro Ala Gly His Leu			
	115	120	125

<210> 1531

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1531

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agcgttggtgac tgggacgccg acgctgaaaa agaagctgac gagtccttgg gggcgcccg
120
acattcggca agcatgagga cggggagcat cgagaccgag acagctcggc gaaggaattt
180
cgggggtggca ggcattggca aactagcttt ctgtgatcgg cgtgcgcggc cgggcaacaa
240
cagggcgctcg tcaggtggtc ttccgggctcg acttcgtctc cgttcccggc acctcccag
300
tgcgcatggc caggtggttc aagtcggggc ggatcagtca taccgtgctg ctcagctccg
360
gcttttcacc ggattccagc gctggtgtgg tcaccagcaa cctgacgcga ggattttagc
420
acccccttcg cataccgcta tccagggcct ccacgacagc ggcaccgatg acgatcgctg
480
tcaccgagcg cggcgttttc ggcagcttcc acatggggat cagaccatat tgatgcactg
540
gcgatccctt catacgcgag ccgccgatat ggcccccgag tgaggccctt cagttcgcg
600
tgacgcatgc cgtctgcgc agcctgccaa cgctttcccg caacctcacc acacgtttgc
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720
cgagag
726

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<210> 1532

<211> 178

<212> PRT

<213> Homo sapiens

<400> 1532

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Met Val Ile Gly Pro Ala Leu Asp Trp Asp Ala Asp Ala Glu Lys Glu
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Ala Asp Glu Ser Leu Gly Ala Pro Ala His Ser Ala Ser Met Arg Thr
          20           25           30
Gly Ser Ile Glu Thr Ala Thr Ala Arg Arg Arg Asn Phe Gly Val Ala
          35           40           45
Gly Met Ala Lys Leu Ala Phe Cys Asp Arg Arg Ala Arg Pro Gly Asn
 50           55           60
Asn Arg Ala Ser Ser Gly Gly Leu Arg Ala Arg Leu Arg Leu Arg Ser
65           70           75           80
Arg His Leu Pro Ser Ala His Gly Gln Val Val Gln Val Gly Ala Asp
          85           90           95
Gln Ser Tyr Arg Cys Ala Gln Leu Arg Leu Phe Thr Gly Phe Gln Arg
          100          105          110
Trp Cys Gly His Gln Gln Pro Asp Ala Arg Ile Leu Ala Pro Pro Ser
          115          120          125
His Thr Ala Ile Gln Gly Leu His Asp Ser Gly Thr Asp Asp Asp Arg
          130          135          140
Val His Arg Ala Arg Arg Phe Arg Gln Leu Pro His Gly Asp Gln Thr
145           150           155           160
Ile Leu Met His Trp Arg Ser Leu His Thr Arg Ala Ala Asp Met Ala
          165          170          175
Pro Glu

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<210> 1533

<211> 364

<212> DNA

<213> Homo sapiens

<400> 1533

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natatgctgg tcgatcatgt gcatcagatc gtccagtggc cggagcgcgg ctggctggcg
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gagattattc acagcgaacg ggcgaccggc ggtgcgccgc ttaacgtcct gctgacgctg
120
gttaaaatgc acgtcggcctt gccgttgca gcggtcggtc ttatcggcga agacagcgat
180
ggcgattaca ttatggcgat gctcgaccag taccacgtca atcgccagcg ggtacagcgc
240
accacgtttg ccccccacgtc gatgtcgcag gtgatgaccg atcccactgg gcagcgcacc
300
tttttccatt cgctgcgcgc caatcgctg ctgatctcc ccgcctttga tcgactcgac
360
gcgt
364

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<210> 1534

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1534

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Xaa Met Leu Val Asp His Val His Gln Ile Val Gln Trp Pro Glu Arg

```

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      1             5             10             15
Gly Trp Leu Ala Glu Ile Ile His Ser Glu Arg Ala Thr Gly Gly Ala
      20             25             30
Pro Leu Asn Val Leu Leu Thr Leu Val Lys Met His Val Gly Leu Pro
      35             40             45
Leu Gln Ala Val Gly Leu Ile Gly Glu Asp Ser Asp Gly Asp Tyr Ile
      50             55             60
Met Ala Met Leu Asp Gln Tyr His Val Asn Arg Gln Arg Val Gln Arg
      65             70             75             80
Thr Thr Phe Ala Pro Thr Ser Met Ser Gln Val Met Thr Asp Pro Thr
      85             90             95
Gly Gln Arg Thr Phe Phe His Ser Pro Ala Ala Asn Arg Leu Leu Asp
      100            105            110
Leu Pro Ala Phe Asp Arg Leu Asp Ala
      115            120

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<210> 1535

<211> 369

<212> DNA

<213> Homo sapiens

<400> 1535

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gaattcgggg ggctccggga atgaagtttc catttcgcaa gccttctgaa gcaaattccgc
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caatccctgg ggcccgcggt gcgtgccggc cagcggccag tcttgcccg gaatgatcca
120
ctcgatatct tcggcagaca acgccagcag accgggccta tcgccgcggc ccatggctgc
180
aaaaaaactc ttcacagtct ggacattccc ttgtgtgctc atcgaaatct ctccatgtcc
240
tttacctggg atcgtgtccg atctcatcgg acgcgttgag gacctgtgg tgaggacggg
300
gtgtcgggtga ttcagccgat atcgactttg catggcgatg tcccagctgc cggagccgtt
360
actggccac
369

```

<210> 1536

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1536

```

Met Gln Ser Arg Tyr Arg Leu Asn His Arg His Pro Val Leu Thr Ser
  1             5             10             15
Arg Ser Ser Thr Arg Pro Met Arg Ser Asp Thr Ile Pro Gly Lys Gly
      20             25             30
His Gly Glu Ile Ser Met Ser Thr Gln Gly Asn Val Gln Thr Val Lys
      35             40             45
Ser Phe Phe Ala Ala Met Gly Arg Gly Asp Arg Pro Gly Leu Leu Ala
      50             55             60
Leu Ser Ala Glu Asp Ile Glu Trp Ile Ile Pro Gly Gln Asp Trp Pro
      65             70             75             80
Leu Ala Gly Thr His Arg Gly Pro Gln Gly Leu Ala Asp Leu Leu Gln

```

				85						90					95
Lys	Ala	Cys	Glu	Met	Glu	Thr	Ser	Phe	Pro	Glu	Pro	Pro	Glu	Phe	
				100				105					110		

<210> 1537

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1537

```

ccactcgcgg cgctcctga gccctctcgt gtgtcaggac gccagcatcc tgttcgtgtt
60
ctcggggctg ctgcacgtgt accagcggaa gatcggcagc caggaggaca cctgcttgtt
120
cctcacgcgc cccggggaga tggtagggcca gctggccgtg ctcaccgagg agacctcgtc
180
ggcgtggttg agacactgac ccaccaggcc cgggcgacca cgggtgcatgc cgttcgggac
240
tcagaattgg ccaagctgcc ggcaggagcc ctcacgtcca tcaagcgag gtac
294

```

<210> 1538

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1538

Pro	Leu	Ala	Ala	Pro	Pro	Glu	Pro	Ser	Arg	Val	Ser	Gly	Arg	Gln	His
1				5				10						15	
Pro	Val	Arg	Val	Leu	Gly	Ala	Ala	Ala	Arg	Val	Pro	Ala	Glu	Asp	Arg
			20					25					30		
Gln	Pro	Gly	Gly	His	Leu	Leu	Val	Pro	His	Ala	Pro	Arg	Gly	Asp	Gly
		35					40					45			
Gly	Pro	Ala	Gly	Arg	Ala	His	Arg	Gly	Asp	Leu	Val	Gly	Val	Val	Glu
	50					55					60				
Thr	Leu	Thr	His	Gln	Ala	Arg	Ala	Thr	Thr	Val	His	Ala	Val	Arg	Asp
65				70						75				80	
Ser	Glu	Leu	Ala	Lys	Leu	Pro	Ala	Gly	Ala	Leu	Thr	Ser	Ile	Lys	Arg
				85					90					95	

Arg Tyr

<210> 1539

<211> 1015

<212> DNA

<213> Homo sapiens

<400> 1539

```

acgcgttcgg gcgtcaggca cagcatctc aacagatgtg gctgacacc aaggcagtcg
60
gcctcagtgc cctgtcacc acctagaacc tgttcacagc atgtcatccg ggctgctctg
120
gccttgactg gacatgatta tttatcctta cacaccgtgg ctgctctaca ggccaagaaa
180

```

caggctgctc agccaggggc aggagaaggt gggtcaggct ccccggggac ctcaggccct
 240
 gacgcacccct ggcctcaccct taggcctcct ctgtcggggc agcctggctc agcagagccc
 300
 gggacacacg gctgaggcca cccaggctgg gccatcttgc cctgttttg tgccccctac
 360
 tcagttctcc ttctgtcctg gctcaggctc agggcagtc agaggggtggc tgagaagcag
 420
 gaggagcctc agagaccctc cctcgaag cactggggct tccacctcac aagcggcagg
 480
 ttcgctttgg gagctgctgg tccatcgccc aggcctggcc aggggcaggc gaggatcctg
 540
 gttgccgac catcgccag gcctggccca ggagccgggtg aggaacctgg ggctgttggtg
 600
 caggggtcgc cgtctccagc tctctgccgt ggtgagggga ttgtgctgtg tgcacaccac
 660
 ctggctgcat cgaatccac catggcccag aggggtggacc tgtggctcct tggggggcca
 720
 gcatccccag tctaattgggt gccctgcca ctctcctgag ttcccggtga gagtcccccc
 780
 caacacctca gccttcaact ttctcagtta atcaaaagat tccaaaaaaa gcaaacccat
 840
 cagaacggct tctccaccg agtggtcagg ataaataatc atgtccagtc aaggccagag
 900
 cagcccggat gacatgctat gaacaggttt taggtgggtg acagggcact gaggccgact
 960
 gccttgggtg tcagccacat ctgttgagat gcgtgtgctt gacgcccga cgcgt
 1015

<210> 1540

<211> 89

<212> PRT

<213> Homo sapiens

<400> 1540

His	Pro	Arg	Gln	Ser	Ala	Ser	Val	Pro	Cys	His	Pro	Pro	Arg	Thr	Cys
1				5				10						15	
Ser	Gln	His	Val	Ile	Arg	Ala	Ala	Leu	Ala	Leu	Thr	Gly	His	Asp	Tyr
			20					25					30		
Leu	Ser	Leu	His	Thr	Val	Ala	Ala	Leu	Gln	Ala	Lys	Lys	Gln	Ala	Ala
			35					40					45		
Gln	Pro	Gly	Ser	Gly	Glu	Gly	Gly	Ser	Gly	Ser	Pro	Gly	Thr	Ser	Gly
			50					55					60		
Pro	Asp	Ala	Ser	Trp	Pro	His	Pro	Arg	Pro	Pro	Leu	Ser	Gly	Gln	Pro
65						70				75					80
Gly	Ser	Ala	Glu	Pro	Gly	Thr	His	Gly							

<210> 1541

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 1541

cgccgatcac ggggagcccc tcgactgcct cccagaacaa agtgggaaag ggaagcttag
60
cccgcgcgtg ccgcctccga gcagcccgcc aggactctgg ctactggaga tgggcgcccc
120
gctatcgcg cgacgggtgc cggcggaccc gtccctggcc ctggacgcgc tgccccgga
180
gctgctggtg caggtgctga gccacgtgcc ggccacgctc cttggacacg cgatgccgcc
240
cagtgtgccg cgccctggcg gacatagtgg acgggcccac tgggaggctg ctgcaactgg
300
cccgcgaccg cagcgccgag ggccgagcac tctacgcagt ggctcaacgc tgccctgcca
360
acaacgaaga caaagaggag ttcccgtgt gcgccttggc gcgtactga ctgcgcgcgc
420
ccttcggccg caatctcatc ttcaactcct gcggagagca gggcttcaga ggctgggagg
480
tggagcatgg cgggaacggc tgggccatag aaaagaacct aacaccggtg cctggggctc
540
cttcgcagac ctgcttcgtg acctctttcg aatggtgctc caagaggcag cttgtggacc
600
tggatgatga aggggtgtgg caggagctgc tggacagcgc ccagattgag atctgtgtgg
660
ctgactggtg gggcgctcga gagaactgcg gctgcgtcta ccagctccgg gtccgccttc
720
tggatgtgta tgaaaaggaa gtggtcaagt tctcagcctc acctgacctg gtcccttcagt
780
ggactgagag gggctgccga caggtctccc acgtcttcac caactttggc aagggcattc
840
gctacgtatc ttttgagcag tacgggagag acgtgagttc ctgggtgggg cactatggcg
900
cccttgtagc ccactccagt gtgagggcca ggatccgtct gtcctagcga ctggactact
960
gcctgacgtt gtcagtcaag accagccttg cagccaggtg cagtggctca cacctgtggg
1020
atctccccc tttggccttc caaaatgttg cgattatagg cgtgagccac tgtggctggc
1080
ctgaattttt ctagtatcca cattcataaa gtaaaaagaa aataaaaagg catagaatgt
1140
caagctaacc aggcgtccgc tacttcagaa gagtgtactg tcgcatgggg agtctgtaac
1200
catgcttttc acttccactg catctctcgc tggctcaaaa cagcacaggt gtgtccattg
1260
gacaacagag agtgggaatt ccaaaagtat gggcactagg aaaagacttc ttccatcaag
1320
cttaattggt ttgttattca tttaatgact ttccctgctg ttacctaatt acaaattgga
1380
tggaactgtg tttttttctg ctttggtttt tcagtttgt gtttctgtag ccatattgta
1440
ttctgtgtca aataaagtcc agttggattc tggaaaaaaa aa
1482

<210> 1542

<211> 57

<212> PRT

<213> Homo sapiens

<400> 1542

```

Lys Gly Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr Ser Glu Glu
 1             5             10             15
Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His Phe His Cys
          20             25             30
Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu Asp Asn Arg
          35             40             45
Glu Trp Glu Phe Gln Lys Tyr Gly His
 50             55

```

<210> 1543

<211> 311

<212> DNA

<213> Homo sapiens

<400> 1543

```

gctagcgatg ctactttaag gtatgcgaag ttggatgctg acgttgctc ctatcggttg
60
gagtcaaacg gacgaacaag cgttcgaggt agctttaaat gcgggcgacg ccagaaagtt
120
accaaagtcg gtgccgcgcc ttatgtttct cgaatggctc acgcgccgag gctacttgct
180
ccacggctcg agccgagccg acctcgtttg ttttgaacct cgagcaccca aagacttcag
240
ccctgacgag ttcagcaaac gcaccgccgt tttcgctctc tcagatgggg tgtggcccc
300
cncnccccnc c
311

```

<210> 1544

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1544

```

Met Arg Ser Trp Met Leu Thr Leu Pro Pro Ile Gly Trp Ser Gln Thr
 1             5             10             15
Asp Glu Gln Ala Phe Glu Val Ala Leu Asn Ala Gly Asp Ala Arg Lys
          20             25             30
Leu Pro Lys Ser Val Pro Arg Leu Met Phe Leu Glu Trp Leu Thr Arg
          35             40             45
Arg Gly Tyr Leu Leu His Gly Ser Ser Arg Ala Asp Leu Val Cys Phe
          50             55             60
Glu Pro Arg Ala Pro Lys Asp Phe Ser Pro Asp Glu Phe Ser Lys Arg
          65             70             75             80
Thr Ala Val Phe Ala Ser Ser Asp Gly Val Trp Pro Pro Xaa Xaa Xaa
          85             90             95

```

<210> 1545

<211> 362

<212> DNA

<213> Homo sapiens

<400> 1545
 ccatggtgcg gccgtctggt aacgataggc aaatccttgc catgccacca attcttcctt
 60
 caacagtagt tggcgaatcc ttcgatggtc aagtcctgtg agcttgctca tctgacggat
 120
 cgtctctgtc tcaagcacct cgcctgtttc cagggttcaag gcctggatag tgcgagtgtc
 180
 gtactgggtcg atcacttcca ccgagtggtc tgggtagccc cttgccattc gctttatgat
 240
 ctcaaccata gatgcatttg gcatgttcca gagcttgtac tccttaacga tctctctggc
 300
 gtcgtagaaa accttcacgc tatcgtcagg atgggtcact gtggtgatgt accgtccaga
 360
 ac
 362

<210> 1546
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1546
 Met Val Lys Ser Cys Glu Leu Ala His Leu Thr Asp Arg Leu Cys Leu
 1 5 10 15
 Lys His Leu Ala Cys Phe Gln Val Gln Gly Leu Asp Ser Ala Ser Val
 20 25 30
 Val Leu Val Asp His Phe His Arg Val Val Trp Val Ala Pro Cys His
 35 40 45
 Ser Leu Tyr Asp Leu Asn His Arg Cys Ile Trp His Val Pro Glu Leu
 50 55 60
 Val Leu Leu Asn Asp Leu Ser Gly Val Val Glu Asn Leu His Ala Ile
 65 70 75 80
 Val Arg Met Gly His Cys Gly Asp Val Pro Ser Arg
 85 90

<210> 1547
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1547
 cgcgttgcca caccggaaga cccggccagc tcacgcctgg gtgaaagttt ctgggcgctt
 60
 ctgccgcgctt cgggtgtggtt cagcgccgtg tcggcgtgga acctggagcg cgagcgcttg
 120
 cgcaaactcg gcctgccggc ctggcactgg aagaacgccg tgctcagtgc ctggatgtac
 180
 agcgtggtgt tgtggggggt gatgattgtc tggttgggcg cggcggtgat tccgttcttg
 240
 atcattcagg gtgtctacgg gttctcgttg ctggaagtgg tcaactacgt cgagcactac
 300
 gggcttaaac gccagaagtt gcccaacggt cgttatgaac ggtgttcgcc tcggcactcg
 360

tggaacagca accggattgt caccaatatc tttctgttcc aacttcagcg gcattccgac
 420
 caccatgcc
 429

<210> 1548
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1548
 Arg Val Ala Thr Pro Glu Asp Pro Ala Ser Ser Arg Leu Gly Glu Ser
 1 5 10 15
 Phe Trp Ala Phe Leu Pro Arg Ser Val Trp Phe Ser Ala Val Ser Ala
 20 25 30
 Trp Asn Leu Glu Arg Glu Arg Leu Arg Lys Leu Gly Leu Pro Ala Trp
 35 40 45
 His Trp Lys Asn Ala Val Leu Ser Ala Trp Met Tyr Ser Val Val Leu
 50 55 60
 Trp Gly Val Met Ile Val Trp Leu Gly Ala Ala Val Ile Pro Phe Leu
 65 70 75 80
 Ile Ile Gln Gly Val Tyr Gly Phe Ser Leu Leu Glu Val Val Asn Tyr
 85 90 95
 Val Glu His Tyr Gly Leu Lys Arg Gln Lys Leu Pro Asn Gly Arg Tyr
 100 105 110
 Glu Arg Cys Ser Pro Arg His Ser Trp Asn Ser Asn Arg Ile Val Thr
 115 120 125
 Asn Ile Phe Leu Phe Gln Leu Gln Arg His Ser Asp His His Ala
 130 135 140

<210> 1549
 <211> 443
 <212> DNA
 <213> Homo sapiens

<400> 1549
 gtcgacaggc tccagggttc tgttttgtag tgcacccgct gtggtgcaac atgcgtctgg
 60
 gcacaccagc gtgcgccgtt tctgtgtgta gtctttcctc tctgactcca ggggtattgg
 120
 gtctttctgc cagcgcccat gcaactttgg cagcctggcc tgtctgctgg taagtggggc
 180
 agaatccctg cactccacca ttcttgggca aactccctc taggattttg gtctccctt
 240
 tctctctggt ctttgaccac cgctaccag caaactcctc catctagacc agccagcatt
 300
 ggtttcttcc actccccag ctgccgctg ggaggcgcca ctgcaaactt cctgggggc
 360
 tcccagctgc tcagagatcc ccatgccctt cctgatcag ctccctgcc ggttctcatc
 420
 ccgacgcggc tgcattggata ttc
 443

<210> 1550

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 1550
 Met Arg Thr Gly Gln Gly Ala Asp Gln Gly Arg Ala Trp Gly Ser Leu
 1 5 10 15
 Ser Ser Trp Glu Thr Pro Gly Lys Phe Ala Val Ala Pro Pro Thr Arg
 20 25 30
 Gln Leu Gly Glu Trp Lys Lys Pro Met Leu Ala Gly Leu Asp Gly Gly
 35 40 45
 Val Cys Trp Val Ala Val Val Lys Asp Gln Arg Glu Lys Gly Asp Gln
 50 55 60
 Asn Pro Arg Gly Ser Val Ala Gln Glu Trp Trp Ser Ala Gly Ile Leu
 65 70 75 80
 Pro His Leu Pro Ala Asp Arg Pro Gly Cys Gln Ser Cys Met Gly Ala
 85 90 95
 Gly Arg Lys Thr Gln Tyr Pro Trp Ser Gln Arg Gly Lys Thr Thr Thr
 100 105 110
 Gly Asn Gly Arg Arg Trp Cys Ala Gln Thr His Val Ala Pro Gln Arg
 115 120 125
 Val His Tyr Lys Thr Glu Pro Trp Ser Leu Ser
 130 135

<210> 1551
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 1551
 ccatggatac cccacctctg gcaactcaaca tgacttggct gccacacacc aggaaacctc
 60
 agaggagcag ccagctggcc aagcaccctt gccctgccc tgcgggctcc acaaaagctg
 120
 gaggagcaaa cgcagctcac ctctttttct gtccactgct tcagggccta cccctgtgct
 180
 ttggagatgg aaaaaagtg agagagctcc ctgacacacc ctcccagggc gaggatggca
 240
 gtccttctt ccatttggtc ctaacacagc ctcccagga gaccagggc atccnnnn
 300
 ccnnnc
 306

<210> 1552
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1552
 Met Asp Thr Pro Pro Leu Ala Leu Asn Met Thr Trp Leu Pro His Thr
 1 5 10 15
 Arg Lys Pro Gln Arg Ser Ser Gln Leu Ala Lys His Pro Cys Pro Cys
 20 25 30
 Pro Ala Gly Ser Thr Lys Ala Gly Gly Ala Asn Ala Ala His Leu Phe

```

          35          40          45
Phe Cys Pro Leu Leu Gln Gly Leu Pro Leu Cys Phe Gly Asp Gly Thr
   50          55          60
Lys Val Arg Glu Leu Pro Asp Thr Pro Ser Gln Gly Glu Asp Gly Ser
65          70          75          80
Ser Phe Leu His Leu Val Leu Thr Gln Pro Pro Gln Glu Thr Arg Gly
          85          90          95
Ile Pro Xaa Pro Xaa
          100

```

<210> 1553

<211> 657

<212> DNA

<213> Homo sapiens

<400> 1553

```

atcctgcaga atgatggcgt ggtcaccagc ccctattccc ggccacgcaa ggcgggccac
60
acgctactca tcctgggggg ccagaccttc atgtgtgaca agatctacca ggtggaccac
120
aaggccaagg agatcatccc caaggccgac ctgcccagcc cccggaagga gttcagcgcc
180
tcagcgatcg gctgcaaggt ctatgtgacg gggggcaggg gctccgagaa cggggtctcc
240
aaggatgtct ggggtgtacga caccgtacat gaggaatggt ccaaggcggc gcccatgctg
300
attgcccgct ttggccatgg ctcagctgag ctggagaact gcctctatgt ggtgggggga
360
cacacatccc tggcaggggt cttcccggcc tgccttctg tctccctgaa acaagtggag
420
aaatacgacc ctggggccaa caagtggatg atggtggccc ccttgcgga tggcgtcagc
480
aatgccgcag tggtgagtgc caagctgaag ctctttgttt ttggaggaac cagcatccac
540
cgggacatgg tgtccaaggt ccagtgtat gacccctcgg agaacagggtg gacgatcaag
600
gccgagtgcc ccagccttg gcggtacaca gccgctgccg tcctgggcag ccagatc
657

```

<210> 1554

<211> 219

<212> PRT

<213> Homo sapiens

<400> 1554

```

Ile Leu Gln Asn Asp Gly Val Val Thr Ser Pro Tyr Ser Arg Pro Arg
  1          5          10          15
Lys Ala Gly His Thr Leu Leu Ile Leu Gly Gly Gln Thr Phe Met Cys
          20          25          30
Asp Lys Ile Tyr Gln Val Asp His Lys Ala Lys Glu Ile Ile Pro Lys
          35          40          45
Ala Asp Leu Pro Ser Pro Arg Lys Glu Phe Ser Ala Ser Ala Ile Gly
          50          55          60
Cys Lys Val Tyr Val Thr Gly Gly Arg Gly Ser Glu Asn Gly Val Ser

```

```

65          70          75          80
Lys Asp Val Trp Val Tyr Asp Thr Val His Glu Glu Trp Ser Lys Ala
      85          90          95
Ala Pro Met Leu Ile Ala Arg Phe Gly His Gly Ser Ala Glu Leu Glu
      100         105         110
Asn Cys Leu Tyr Val Val Gly Gly His Thr Ser Leu Ala Gly Val Phe
      115         120         125
Pro Ala Ser Pro Ser Val Ser Leu Lys Gln Val Glu Lys Tyr Asp Pro
      130         135         140
Gly Ala Asn Lys Trp Met Met Val Ala Pro Leu Arg Asp Gly Val Ser
145          150          155          160
Asn Ala Ala Val Val Ser Ala Lys Leu Lys Leu Phe Val Phe Gly Gly
      165         170         175
Thr Ser Ile His Arg Asp Met Val Ser Lys Val Gln Cys Tyr Asp Pro
      180         185         190
Ser Glu Asn Arg Trp Thr Ile Lys Ala Glu Cys Pro Gln Pro Trp Arg
      195         200         205
Tyr Thr Ala Ala Ala Val Leu Gly Ser Gln Ile
      210         215

```

<210> 1555

<211> 328

<212> DNA

<213> Homo sapiens

<400> 1555

```

acgcgtggga gctcgggaga gaggactctg cttctggggg ttgaagggtga gcgtgattct
60
ggaggagcct gccttcgggc gagcgtgtgt tgtggagagg atgcaggaca tgagtgatcc
120
tgtaaggggtg atcgagtgtg cctcgtgaag tctggaagtc agcgagtgtg ggccgtggag
180
gtgagccacc ggtttgtgat ttgaaactga gtgagagtgc tgtggagcgc gaaatatgtg
240
tgtgtgtaga gtggaggtga gcgaatttgt gtgcatgtga gacggacgca atggcagagt
300
gtagcatcct gtgttgggat tgggattn
328

```

<210> 1556

<211> 102

<212> PRT

<213> Homo sapiens

<400> 1556

```

Met Leu His Ser Ala Ile Ala Ser Val Ser His Ala His Lys Phe Ala
1      5      10      15
His Leu His Ser Thr His Thr His Ile Ser Arg Ser Thr Ala Leu Ser
      20      25      30
Leu Ser Phe Lys Ser Gln Thr Gly Gly Ser Pro Pro Arg Pro Thr Leu
      35      40      45
Ala Asp Phe Gln Thr Ser Arg Gly Thr Leu Asp His Pro Tyr Arg Ile
      50      55      60
Thr His Val Leu His Pro Leu His Asn Thr Arg Ser Pro Gln Gly Arg

```

```

65              70              75              80
Leu Leu Gln Asn His Ala His Leu Gln Thr Pro Glu Ala Glu Ser Ser
              85              90              95
Leu Pro Ser Ser His Ala
              100

```

<210> 1557
 <211> 390
 <212> DNA
 <213> Homo sapiens

```

<400> 1557
gtgcacagac ttttcgagcg ggccattaag tggtttacgt ctgggatcgg ctccgctttc
60
tcgcattttt cggatcaggt caaattctgt gtcggcatt gacaggaaat tgacgtgtat
120
cagtcgattc tttgcagtgt ctggacggca ggctgaatag gctgaaagca ggacaactac
180
gaccatgccg caccatgtgg atcgtctacc gttttggcct tgccgccatt gccttgatcg
240
ccctgattgc gctgttcgtg tgccagtacc ggctatcggc caggctggcg cgccggaagc
300
gaagctcgat gggcagcagg cgcattgagga acccggcgcc attgaatcgt gaggcgctgg
360
cggagcgcgg cccgttcaaa tgcgacgcgt
390

```

<210> 1558
 <211> 114
 <212> PRT
 <213> Homo sapiens

```

<400> 1558
Met Ala Pro Gly Ser Ser Cys Ala Cys Cys Pro Ser Ser Phe Ala Ser
1      5      10      15
Gly Ala Pro Ala Trp Pro Ile Ala Gly Thr Gly Thr Arg Thr Ala Gln
      20      25      30
Ser Gly Arg Ser Arg Gln Trp Arg Gln Gly Gln Asn Gly Arg Arg Ser
      35      40      45
Thr Trp Cys Gly Met Val Val Val Leu Leu Ser Ala Tyr Ser Ala
      50      55      60
Cys Arg Pro Asp Thr Ala Lys Asn Arg Leu Ile His Val Asn Phe Leu
65      70      75      80
Ser Met Pro Ser Thr Glu Phe Asp Leu Ile Arg Lys Met Arg Glu Ser
      85      90      95
Gly Ala Asp Pro Arg Arg Lys Pro Leu Asn Gly Pro Leu Glu Lys Ser
      100      105      110
Val His

```

<210> 1559
 <211> 556
 <212> DNA
 <213> Homo sapiens

<400> 1559
 accggtggcg acggtatcgg tggcgcgtcg atccttgccct cggaatcctt cgctgcagag
 60
 ggtgagtcga agcgaccag cgtccagggtg ggcgaccgt tcatggagaa gctgctcatc
 120
 gagtgcaccc ttgacctctt caacgccggg gtagttgagg ccttgagga tttcggtgcc
 180
 gccggaatct cctgtgccac ctccgagctg gccagtgtg gcgacggtgg catgcacgtc
 240
 gagctcgacc gcgttccgct gcgcgaccg aacctcgccc ctgaagagat cctcatgagc
 300
 gagtccagg agcggtatggc cgcgggtggtg cgcgccgata agcttgaccg cttcatggag
 360
 atctgcgccc attgggggtgt cgctgccact gtcattggcg aggtcaccga caccggtcga
 420
 cttcacattg attggcaggg cgagcggatt gtcgacgtcg atccgcggac ggttgctcac
 480
 gacggaccgg ttctcgacat gccggccgcc cgtccgtggt ggattgatga gctcaacgag
 540
 aacgacgcta acgctg
 556

<210> 1560

<211> 185

<212> PRT

<213> Homo sapiens

<400> 1560
 Thr Gly Gly Asp Gly Ile Gly Gly Ala Ser Ile Leu Ala Ser Glu Ser
 1 5 10 15
 Phe Ala Ala Glu Gly Glu Ser Lys Arg Pro Ser Val Gln Val Gly Asp
 20 25 30
 Pro Phe Met Glu Lys Leu Leu Ile Glu Cys Thr Leu Asp Leu Phe Asn
 35 40 45
 Ala Gly Val Val Glu Ala Leu Gln Asp Phe Gly Ala Ala Gly Ile Ser
 50 55 60
 Cys Ala Thr Ser Glu Leu Ala Ser Ala Gly Asp Gly Gly Met His Val
 65 70 75 80
 Glu Leu Asp Arg Val Pro Leu Arg Asp Pro Asn Leu Ala Pro Glu Glu
 85 90 95
 Ile Leu Met Ser Glu Ser Gln Glu Arg Met Ala Ala Val Val Arg Pro
 100 105 110
 Asp Gln Leu Asp Arg Phe Met Glu Ile Cys Ala His Trp Gly Val Ala
 115 120 125
 Ala Thr Val Ile Gly Glu Val Thr Asp Thr Gly Arg Leu His Ile Asp
 130 135 140
 Trp Gln Gly Glu Arg Ile Val Asp Val Asp Pro Arg Thr Val Ala His
 145 150 155 160
 Asp Gly Pro Val Leu Asp Met Pro Ala Ala Arg Pro Trp Trp Ile Asp
 165 170 175
 Glu Leu Asn Glu Asn Asp Ala Asn Ala
 180 185

<210> 1561
 <211> 466
 <212> DNA
 <213> Homo sapiens

<400> 1561
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 ccaagatgaa gacagcattc agaattgatg tgatttcctt gaatgtggct taggaaatgt
 120
 ggacacttaa aactctcact tgaaattggg cacaggtttg atgtagagat aaggacgggg
 180
 tgcggaatgg agaccattt tgtcattgat tcctctgacc gataaggcca tagtgcagtt
 240
 aggtgatatt cgaaagcttc tttgatgctc tttatgtata tgttggaagg aactaccagg
 300
 cgttgcttta aattcccaat gtgttggttc gttactacta atttaatacc gtaagctcta
 360
 ggtaaagtcc catgttggtg aactctgact gttctctttg gaattgaacg ttttgcattc
 420
 tcctcctgtg gctttaggtc tgacattgta tttgacctt actagt
 466

<210> 1562
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1562
 Met Ser Asp Leu Lys Pro Gln Glu Glu Asp Ala Lys Arg Ser Ile Pro
 1 5 10 15
 Lys Arg Thr Val Arg Val Gln Gln His Gly Thr Leu Pro Arg Ala Tyr
 20 25 30
 Gly Ile Lys Leu Val Val Thr Lys Gln His Ile Gly Asn Leu Lys Gln
 35 40 45
 Arg Leu Val Val Pro Ser Asn Ile Tyr Ile Lys Ser Ile Lys Glu Ala
 50 55 60
 Phe Glu Tyr His Leu Thr Ala Leu Trp Pro Tyr Arg Ser Asp Glu Ser
 65 70 75 80
 Met Thr Lys Trp Val Ser Ile Pro His Pro Val Leu Ile Ser Thr Ser
 85 90 95
 Asn Leu Cys Pro Ile Ser Ser Glu Ser Phe Lys Cys Pro His Phe Leu
 100 105 110
 Ser His Ile Gln Gly Asn His Ile Asn Ser Glu Cys Cys Leu His Leu
 115 120 125
 Gly Met
 130

<210> 1563
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 1563

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 atcttcgctg agatgcagca gcgcaaaacc ctggctgccg agttgccatt gcgcgcggta
 120
 ttgcgtgacc accgtggcgc catcgtgctg tcgatgctgt tgacgtgggt gctgtcggcg
 180
 ggtgtggttg tggatcctct gatgaccccg accgtgctgc aaaccgtcta ccacttcagc
 240
 ccgacgggtg cgctgcaagc caacagcctg gcgatcgta cgctgagcct gggctgcatt
 300
 gcgtccggcg cgctggctga ccgttttggg gccggtcgcg ttttggtcac cggttggcgt
 360
 tgctgctggc cacttcctgg acgctgtatc acagcctgat ggcccagacg gaatgggtga
 420
 ataagtgtac gcgt
 434

<210> 1564

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1564

Leu	Gly	Gly	Val	Phe	Gly	Leu	Leu	Ser	Val	Tyr	Leu	Pro	Arg	Trp	Leu
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His	Glu	Thr	Pro	Ile	Phe	Ala	Glu	Met	Gln	Gln	Arg	Lys	Thr	Leu	Ala
			20				25					30			
Ala	Glu	Leu	Pro	Leu	Arg	Ala	Val	Leu	Arg	Asp	His	Arg	Gly	Ala	Ile
	35					40				45					
Val	Leu	Ser	Met	Leu	Leu	Thr	Trp	Leu	Leu	Ser	Ala	Gly	Val	Val	Val
	50					55				60					
Val	Ile	Leu	Met	Thr	Pro	Thr	Val	Leu	Gln	Thr	Val	Tyr	His	Phe	Ser
65				70						75				80	
Pro	Thr	Val	Ala	Leu	Gln	Ala	Asn	Ser	Leu	Ala	Ile	Val	Thr	Leu	Ser
			85				90						95		
Leu	Gly	Cys	Ile	Ala	Ser	Gly	Ala	Leu	Ala	Asp	Arg	Phe	Gly	Ala	Gly
	100						105						110		
Arg	Val	Leu	Val	Thr	Gly	Trp	Arg	Cys	Cys	Trp	Pro	Leu	Pro	Gly	Arg
	115					120						125			
Cys	Ile	Thr	Ala												
	130														

<210> 1565

<211> 373

<212> DNA

<213> Homo sapiens

<400> 1565

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 agagggtgag cggttctggc acctactgga ccatgaaagc aataaagagg acaagggagc
 120
 ctgcattcgg ccatttcttc ccaagaatca ccataaagggt tgtcaaaatc aaggaccctg
 180

atccggtgat tctcgaagtc atcgatgagc agaacaagtt taccctccgag ggagaaaagc
 240
 ggggtggtgct cttgatgctc gacaacctct accgtcccag taccacccgt gcattggcga
 300
 acggggggcgt cccttatctg cggtcgaaga gtgtcactgt tgacctcgta gacagccggg
 360
 acaacacggg tac
 373

<210> 1566

<211> 106

<212> PRT

<213> Homo sapiens

<400> 1566

Met	Ser	Gln	Arg	Val	Ser	Gly	Ser	Gly	Thr	Tyr	Trp	Thr	Met	Lys	Ala
1				5					10					15	
Ile	Lys	Arg	Thr	Arg	Glu	Pro	Ala	Phe	Gly	His	Phe	Phe	Pro	Arg	Ile
			20					25					30		
Thr	Ile	Lys	Val	Val	Lys	Ile	Lys	Asp	Pro	Asp	Pro	Val	Ile	Leu	Glu
		35					40					45			
Val	Ile	Asp	Glu	Gln	Asn	Lys	Phe	Thr	Pro	Glu	Gly	Glu	Lys	Arg	Val
	50					55					60				
Val	Leu	Leu	Met	Leu	Asp	Asn	Leu	Tyr	Arg	Pro	Ser	Thr	His	Arg	Ala
65					70				75					80	
Leu	Ala	Asn	Gly	Gly	Val	Pro	Tyr	Leu	Arg	Ser	Lys	Ser	Val	Thr	Val
			85						90					95	
Asp	Leu	Val	Asp	Ser	Arg	Asp	Asn	Thr	Gly						
			100					105							

<210> 1567

<211> 917

<212> DNA

<213> Homo sapiens

<400> 1567

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 aagccgctgc actcctgggg gaccagttt gatgcctcca ggaggataag tctgaagccg
 120
 ggttgggaag ggagcggaga ggcccaaaca gacgagcagg cagcgccctc tgctggcacc
 180
 ctggagacag ctteggctgc gggggccctg ccttctagtc ctcccagct ttcaggacac
 240
 cttgacaacc tggggtcctt gcagaagtgg cccggctgtc cccaagtct cctgaagcta
 300
 tctgggtagg gtgggaggca gtgctgtgag ccacaaatgc aaagcagagg ggacagatgt
 360
 tgggactcaa agacatgagg tagagctggc cccatgggta ggtgccacca ccagagccca
 420
 tgaggcttcg tgttctagaa ggtggtgggt tagtgccgca ctgagggcgt gtccgggagg
 480
 gagcatgtgt caccagggt caggaaacag catgagtcac gacgcggggg tgtttaaggc
 540

attcgtgccca cagcgggggac ctcggagcta tgccttgata aggcaagtga gggtacatgt
 600
 acgatgatgc ggtttgtgct gcagactgga aaaaagcagg ggctttgtcc tctcctgacc
 660
 ccctcacact ctgccttcac ggtaggctcc tgagaggggg gtctccaagg aggggtgtcag
 720
 tactgcagct tcagctggcg tggatggggg gcttacagga gcagcagggc tgagggagat
 780
 gacagcagta cgaatcgtgg ctctcctgag gcctgggttt cctcatatgt aaaatggggg
 840
 ttgcattaga ccataccctt ggctgtgtt taggcaaata gggatgaaag tggggccaag
 900
 ggctgaagag ctgggtc
 917

<210> 1568

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1568

Met	Gly	Pro	Ala	Leu	Pro	His	Val	Phe	Glu	Ser	Gln	His	Leu	Ser	Pro
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Leu	Leu	Cys	Ile	Cys	Gly	Ser	Gln	His	Cys	Leu	Pro	Pro	Tyr	Pro	Asp
			20				25					30			
Ser	Phe	Arg	Arg	Leu	Gly	Gly	Gln	Pro	Gly	His	Phe	Cys	Arg	Asp	Pro
		35				40					45				
Arg	Leu	Ser	Arg	Cys	Pro	Glu	Ser	Trp	Gly	Gly	Leu	Glu	Gly	Arg	Gly
	50					55				60					
Pro	Ala	Ala	Glu	Ala	Val	Ser	Arg	Val	Pro	Ala	Glu	Gly	Ala	Ala	Cys
65					70					75				80	
Cys	Ser	Val	Trp	Ala	Ser	Pro	Leu	Pro	Ser	Gln	Pro	Gly	Phe	Arg	Leu
			85					90					95		
Ile	Leu	Leu	Glu	Ala	Ser	Asn	Trp	Val	Pro	Gln	Glu	Cys	Ser	Gly	Phe
			100					105					110		
Pro															

<210> 1569

<211> 379

<212> DNA

<213> Homo sapiens

<400> 1569

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 120
 gtggccagca cggaattgct gaaggatggg aagagggaga ccaccgtgag ccaactgctt
 180
 attaacccca cggacctgga catagggcgt gtcttcactt gccgaagcat gaacgaagcc
 240
 atccctagtg gcaaggagac ttccatcgag ctggatgtgc accaccctcc tacagtgacc
 300

ctgtccattg agccacagac ggtgcaggag ggtgagcgtg ttgtctttac ctgccaggcc
 360
 acagccaacc cggagatct
 379

<210> 1570
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1570
 Gly Gly Pro Val Ile Leu Leu Gln Ala Gly Thr Pro His Asn Leu Thr
 1 5 10 15
 Cys Arg Ala Phe Asn Ala Lys Pro Ala Ala Thr Ile Ile Trp Phe Arg
 20 25 30
 Asp Gly Thr Gln Gln Glu Gly Ala Val Ala Ser Thr Glu Leu Leu Lys
 35 40 45
 Asp Gly Lys Arg Glu Thr Thr Val Ser Gln Leu Leu Ile Asn Pro Thr
 50 55 60
 Asp Leu Asp Ile Gly Arg Val Phe Thr Cys Arg Ser Met Asn Glu Ala
 65 70 75 80
 Ile Pro Ser Gly Lys Glu Thr Ser Ile Glu Leu Asp Val His His Pro
 85 90 95
 Pro Thr Val Thr Leu Ser Ile Glu Pro Gln Thr Val Gln Glu Gly Glu
 100 105 110
 Arg Val Val Phe Thr Cys Gln Ala Thr Ala Asn Pro Glu Ile
 115 120 125

<210> 1571
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 1571
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 atcggcatct tcttcttctt gccaaagggc caagccgtgc tccagtcttt ccagatggaa
 120
 gatgcgttcg gcatgtcgac cgaatgggtc ggattggaca acttccgcaa cctgctggat
 180
 gacccacct acctgaattc cttccagcgc accgccgtgt tctcggtgct ggtggcaggg
 240
 gtcgggateg ccgtgtcact ggggtctggcg atctttgccg accccatcac tccgtcgcca
 300
 tgtgtacaag acacactgct gatcgtgccc tacgccgtgg caccatgat cgccggc
 357

<210> 1572
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1572.
 Cys Ala Leu Phe Arg Ser Arg Trp Val Pro Trp Xaa Leu Ile Met Pro

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      1             5             10             15
Gln Met Phe Ile Ile Gly Ile Phe Phe Phe Leu Pro Ser Gly Gln Ala
      20             25             30
Val Leu Gln Ser Phe Gln Met Glu Asp Ala Phe Gly Met Ser Thr Glu
      35             40             45
Trp Val Gly Leu Asp Asn Phe Arg Asn Leu Leu Asp Asp Pro Thr Tyr
      50             55             60
Leu Asn Ser Phe Gln Arg Thr Ala Val Phe Ser Val Leu Val Ala Gly
65             70             75             80
Val Gly Ile Ala Val Ser Leu Gly Leu Ala Ile Phe Ala Asp Pro Ile
      85             90             95
Thr Pro Ser Pro Cys Val Gln Asp Thr Leu Leu Ile Val Pro Tyr Ala
      100             105             110
Val Ala Pro Met Ile Ala Gly
      115

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<210> 1573

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1573

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gaattcccat tgcatctga ttccatgtct ggaaagaggg aagagagaca tcatgcagaa
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tattgtacag attttggaaat cggtacagtt gaaatgggaa ctttttcaga gctggacaga
120
cttttcaagg ctccatcttt ctaataaaact ggccattttt ggaattgggtt ataacacccg
180
ttggaaagag gatatccggt accattatgc tgagatcagc tcccaggtgc cccttggtcaa
240
gcgacttcgg gagtacttca actctgagaa gcctgaagga cggatcatta tgacccgagt
300
gcagaaaatg aactggaaaa atgtttacta caaattt
337

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<210> 1574

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1574

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Met Gln Asn Ile Val Gln Ile Leu Glu Ser Val Gln Leu Lys Trp Glu
      1             5             10             15
Leu Phe Gln Ser Trp Thr Asp Phe Ser Arg Leu His Leu Ser Asn Lys
      20             25             30
Leu Ala Ile Phe Gly Ile Gly Tyr Asn Thr Arg Trp Lys Glu Asp Ile
      35             40             45
Arg Tyr His Tyr Ala Glu Ile Ser Ser Gln Val Pro Leu Gly Lys Arg
      50             55             60
Leu Arg Glu Tyr Phe Asn Ser Glu Lys Pro Glu Gly Arg Ile Ile Met
65             70             75             80
Thr Arg Val Gln Lys Met Asn Trp Lys Asn Val Tyr Tyr Lys Phe
      85             90             95

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<210> 1575
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 1575
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 catctcgttg ccgaaattgg ggccgatggt gtccatgttg ggcagtctga catgccggtc
 120
 gaccaggccc gtgcgattct gggcgacgat ctactcatcg gcttgtccgc tcagactccc
 180
 gcccatgtgg aggccgccct gtcccagggg cgtgacatcg tcgactatct gggagttggg
 240
 gccctgcacg gtactggaac caaacctgag gctggggagc tcggcctggc tgagattcgt
 300
 gatgtcgtca acgccagccc gtggccgggtg tgcgtcatcg gtgggggtgag cgcacccgat
 360
 gctcaagacg tagcccgggt gggatgtgac ggctgagcg tcgtctcggc gatttgccgg
 420
 agtaccgacc ccaagtccag tgcacgggaa cttgcggagg cgtggcgtag g
 471

<210> 1576
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 1576
 Xaa Arg Val Arg Glu Ile Cys Val Ser Gly Gly Val Pro Leu Ile Ile
 1 5 10 15
 Asp Asp Arg Val His Leu Val Ala Glu Ile Gly Ala Asp Gly Val His
 20 25 30
 Val Gly Gln Ser Asp Met Pro Val Asp Gln Ala Arg Ala Ile Leu Gly
 35 40 45
 Asp Asp Leu Leu Ile Gly Leu Ser Ala Gln Thr Pro Ala His Val Glu
 50 55 60
 Ala Ala Leu Ser Gln Gly Arg Asp Ile Val Asp Tyr Leu Gly Val Gly
 65 70 75 80
 Ala Leu His Gly Thr Gly Thr Lys Pro Glu Ala Gly Glu Leu Gly Leu
 85 90 95
 Ala Glu Ile Arg Asp Val Val Asn Ala Ser Pro Trp Pro Val Cys Val
 100 105 110
 Ile Gly Gly Val Ser Ala Ser Asp Ala Gln Asp Val Ala Arg Val Gly
 115 120 125
 Cys Asp Gly Leu Ser Val Val Ser Ala Ile Cys Arg Ser Thr Asp Pro
 130 135 140
 Lys Ser Ser Ala Arg Glu Leu Ala Glu Ala Trp Arg Thr
 145 150 155

<210> 1577
 <211> 287
 <212> DNA
 <213> Homo sapiens

<400> 1577

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 ccccatcctg cgggcttgcg cacgggttgcg ctogaacccg gcgtcgcgca cgcgcgcacc
 120
 ttgcgcgttg ccggggcagg cttccccgct cgcggccagc gcgccgccgg cgatctggtg
 180
 atcgagctgg agccgatgct gccgcaggcg cccgacaagc aactgcacgc gctgatcgag
 240
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 287

<210> 1578

<211> 95

<212> PRT

<213> Homo sapiens

<400> 1578

Leu	Val	Leu	Gln	Arg	Pro	Ile	Ser	Ala	Leu	Arg	Met	Leu	Ile	Gly	Gly
1			5						10				15		
Pro	Leu	Arg	Ile	Pro	His	Pro	Ala	Gly	Leu	Arg	Thr	Val	Ala	Leu	Glu
		20						25				30			
Pro	Gly	Val	Ala	His	Ala	Arg	Thr	Leu	Arg	Val	Ala	Gly	Ala	Gly	Phe
		35				40					45				
Pro	Ala	Arg	Gly	Gln	Arg	Ala	Ala	Gly	Asp	Leu	Val	Ile	Glu	Leu	Glu
	50					55				60					
Pro	Met	Leu	Pro	Gln	Ala	Pro	Asp	Lys	Gln	Leu	His	Ala	Leu	Ile	Glu
65				70					75					80	
Gln	Leu	Asp	Val	Ala	Leu	Gly	Lys	Ser	Ala	Thr	Arg	His	Phe	Pro	
			85						90					95	

<210> 1579

<211> 2829

<212> DNA

<213> Homo sapiens

<400> 1579

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 120
 ggggcgggcg ggagccccgg cagtccgggg tcgccggcga gggccatgtc gctgttgggg
 180
 gaccgctac aggcctgcc gccctcgcc gcccccacgg ggccgctgct cgcccctccg
 240
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 300
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 360
 cgctccgcc tcagttgcct agacctggag cagtgttctc ttaaggtact ggagcctgaa
 420
 ggaagcccca gcctgtgtct gctgaagtta atgggtgaaa aaggttgac agtcacagaa
 480

ttgagtgatt tectgcaggc tatggaacac actgaagttc ttcagcttct cagcccccca
 540
 ggaataaaga ttactgtaaa cccagagtca aaggcagttc tggctggaca gtttgtgaaa
 600
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 660
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 720
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 780
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 840
 aagttgcaaa tctgtgttga accaacttcc caaaaagtga tggcaggcag cacattgggt
 900
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 960
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 1020
 ggaacctact ggtgtcatgt atataatgat cgagacagtc aagatagcaa gaaggtagaa
 1080
 atcatcatag gaagaacaga tgaggcagtg gagtgcactg aagatgaatt aaataatctt
 1140
 ggtcatcctg ataataaaga gcaaacaact gaccagcctt tggcgaagga caaggttgcc
 1200
 cttttgatag gaaatatgaa ttaccgggag caccccaagc tcaaagctcc tttggtggat
 1260
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 1320
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 1380
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 1440
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 1560
 aaaagaaatg actacgatga taccattcca atcttggatg cactaaaagt caccgccaat
 1620
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 1740
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 1860
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 1920
 cttccagaaa gtatgtgtct taagtttgac tgtggtgttc agattcaatt aggatttgca
 1980
 gctgagtttt ccaatgtcat gatcatctat acaagtatag tttaaaacc accggagata
 2040
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gcaaataaag gcacacctga agaaactggc agctacttgg tatcaaagga tcttcccaag
 2160
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 2220
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 2280
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 2340
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 2400
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 2520
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 2580
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 2640
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 2700
 ataaagtggg acattgtgaa aaggcaaatt tgtatatgta gagaaagaat agtagtaact
 2760
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 2820
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 2829

<210> 1580

<211> 824

<212> PRT

<213> Homo sapiens

<400> 1580

Met	Ser	Leu	Leu	Gly	Asp	Pro	Leu	Gln	Ala	Leu	Pro	Pro	Ser	Ala	Ala
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Pro	Thr	Gly	Pro	Leu	Leu	Ala	Pro	Pro	Ala	Gly	Ala	Thr	Leu	Asn	Arg
			20					25					30		
Leu	Arg	Glu	Pro	Leu	Leu	Arg	Arg	Leu	Ser	Glu	Leu	Leu	Asp	Gln	Ala
		35					40					45			
Pro	Glu	Gly	Arg	Gly	Trp	Arg	Arg	Leu	Ala	Glu	Leu	Ala	Gly	Ser	Arg
	50					55				60					
Gly	Arg	Leu	Arg	Leu	Ser	Cys	Leu	Asp	Leu	Glu	Gln	Cys	Ser	Leu	Lys
65				70					75					80	
Val	Leu	Glu	Pro	Glu	Gly	Ser	Pro	Ser	Leu	Cys	Leu	Leu	Lys	Leu	Met
			85					90						95	
Gly	Glu	Lys	Gly	Cys	Thr	Val	Thr	Glu	Leu	Ser	Asp	Phe	Leu	Gln	Ala
			100				105						110		
Met	Glu	His	Thr	Glu	Val	Leu	Gln	Leu	Leu	Ser	Pro	Pro	Gly	Ile	Lys
	115					120						125			
Ile	Thr	Val	Asn	Pro	Glu	Ser	Lys	Ala	Val	Leu	Ala	Gly	Gln	Phe	Val
	130				135					140					
Lys	Leu	Cys	Cys	Arg	Ala	Thr	Gly	His	Pro	Phe	Val	Gln	Tyr	Gln	Trp
145				150					155					160	
Phe	Lys	Met	Asn	Lys	Glu	Ile	Pro	Asn	Gly	Asn	Thr	Ser	Glu	Leu	Ile

				165				170				175				
Phe	Asn	Ala	Val	His	Val	Lys	Asp	Ala	Gly	Phe	Tyr	Val	Cys	Arg	Val	
				180				185				190				
Asn	Asn	Asn	Phe	Thr	Phe	Glu	Phe	Ser	Gln	Trp	Ser	Gln	Leu	Asp	Val	
				195				200				205				
Cys	Asp	Ile	Pro	Glu	Ser	Phe	Gln	Arg	Ser	Val	Asp	Gly	Val	Ser	Glu	
				210				215				220				
Ser	Lys	Leu	Gln	Ile	Cys	Val	Glu	Pro	Thr	Ser	Gln	Lys	Leu	Met	Pro	
225					230				235				240			
Gly	Ser	Thr	Leu	Val	Leu	Gln	Cys	Val	Ala	Val	Gly	Ser	Pro	Ile	Pro	
				245				250				255				
His	Tyr	Gln	Trp	Phe	Lys	Asn	Glu	Leu	Pro	Leu	Thr	His	Glu	Thr	Lys	
				260				265				270				
Lys	Leu	Tyr	Met	Val	Pro	Tyr	Ala	Asp	Leu	Glu	His	Gln	Gly	Thr	Tyr	
				275				280				285				
Trp	Cys	His	Val	Tyr	Asn	Asp	Arg	Asp	Ser	Gln	Asp	Ser	Lys	Lys	Val	
				290				295				300				
Glu	Ile	Ile	Ile	Gly	Arg	Thr	Asp	Glu	Ala	Val	Glu	Cys	Thr	Glu	Asp	
305					310				315				320			
Glu	Leu	Asn	Asn	Leu	Gly	His	Pro	Asp	Asn	Lys	Glu	Gln	Thr	Thr	Asp	
				325				330				335				
Gln	Pro	Leu	Ala	Lys	Asp	Lys	Val	Ala	Leu	Leu	Ile	Gly	Asn	Met	Asn	
				340				345				350				
Tyr	Arg	Glu	His	Pro	Lys	Leu	Lys	Ala	Pro	Leu	Val	Asp	Val	Tyr	Glu	
				355				360				365				
Leu	Thr	Asn	Leu	Leu	Arg	Gln	Leu	Asp	Phe	Lys	Val	Val	Ser	Leu	Leu	
				370				375				380				
Asp	Leu	Thr	Glu	Tyr	Glu	Met	Arg	Asn	Ala	Val	Asp	Glu	Phe	Leu	Leu	
385					390				395				400			
Leu	Leu	Asp	Lys	Gly	Val	Tyr	Gly	Leu	Leu	Tyr	Tyr	Ala	Gly	His	Gly	
				405				410				415				
Tyr	Glu	Asn	Phe	Gly	Asn	Ser	Phe	Met	Val	Pro	Val	Asp	Ala	Pro	Asn	
				420				425				430				
Pro	Tyr	Arg	Ser	Glu	Asn	Cys	Leu	Cys	Val	Gln	Asn	Ile	Leu	Lys	Leu	
				435				440				445				
Met	Gln	Glu	Lys	Glu	Thr	Gly	Leu	Asn	Val	Phe	Leu	Leu	Asp	Met	Cys	
				450				455				460				
Arg	Lys	Arg	Asn	Asp	Tyr	Asp	Asp	Thr	Ile	Pro	Ile	Leu	Asp	Ala	Leu	
465					470				475				480			
Lys	Val	Thr	Ala	Asn	Ile	Val	Phe	Gly	Tyr	Ala	Thr	Cys	Gln	Gly	Ala	
				485				490				495				
Glu	Ala	Phe	Glu	Ile	Gln	His	Ser	Gly	Leu	Ala	Asn	Gly	Ile	Phe	Met	
				500				505				510				
Lys	Phe	Leu	Lys	Asp	Arg	Leu	Leu	Glu	Asp	Lys	Lys	Ile	Thr	Val	Leu	
				515				520				525				
Leu	Asp	Glu	Val	Ala	Glu	Asp	Met	Gly	Lys	Cys	His	Leu	Thr	Lys	Gly	
				530				535				540				
Lys	Gln	Ala	Leu	Glu	Ile	Arg	Ser	Ser	Leu	Ser	Glu	Lys	Arg	Ala	Leu	
545					550				555				560			
Thr	Asp	Pro	Ile	Gln	Gly	Thr	Glu	Tyr	Ser	Ala	Glu	Ser	Leu	Val	Arg	
				565				570				575				
Asn	Leu	Gln	Trp	Ala	Lys	Ala	His	Glu	Leu	Pro	Glu	Ser	Met	Cys	Leu	
				580				585				590				
Lys	Phe	Asp	Cys	Gly	Val	Gln	Ile	Gln	Leu	Gly	Phe	Ala	Ala	Glu	Phe	

595 600 605
 Ser Asn Val Met Ile Ile Tyr Thr Ser Ile Val Tyr Lys Pro Pro Glu
 610 615 620
 Ile Ile Met Cys Asp Ala Tyr Val Thr Asp Phe Pro Leu Asp Leu Asp
 625 630 635 640
 Ile Asp Pro Lys Asp Ala Asn Lys Gly Thr Pro Glu Glu Thr Gly Ser
 645 650 655
 Tyr Leu Val Ser Lys Asp Leu Pro Lys His Cys Leu Tyr Thr Arg Leu
 660 665 670
 Ser Ser Leu Gln Lys Leu Lys Glu His Leu Val Phe Thr Val Cys Leu
 675 680 685
 Ser Tyr Gln Tyr Ser Gly Leu Glu Asp Thr Val Glu Asp Lys Gln Glu
 690 695 700
 Val Asn Val Gly Lys Pro Leu Ile Ala Lys Leu Asp Met His Arg Gly
 705 710 715 720
 Leu Gly Arg Lys Thr Cys Phe Gln Thr Cys Leu Met Ser Asn Gly Pro
 725 730 735
 Tyr Gln Ser Ser Ala Ala Thr Ser Gly Gly Ala Gly His Tyr His Ser
 740 745 750
 Leu Gln Asp Pro Phe His Gly Val Tyr His Ser His Pro Gly Asn Pro
 755 760 765
 Ser Asn Val Thr Pro Ala Asp Ser Cys His Cys Ser Arg Thr Pro Asp
 770 775 780
 Ala Phe Ile Ser Ser Phe Ala His His Ala Ser Cys His Phe Ser Arg
 785 790 795 800
 Ser Asn Val Pro Val Glu Thr Thr Asp Glu Ile Pro Phe Ser Phe Ser
 805 810 815
 Asp Arg Leu Arg Ile Ser Glu Lys
 820

<210> 1581

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1581

gatccgcac tc gcccgtttat tgacgaggtg accttcaccc gagagggcca tacctatcac
 60
 cgggtgcccc aggtggctga cgcttggtc gattcgggct cgatgccctt cgcccagtgg
 120
 ggatacccg atgtgcccgg ttcgaaggag aagttcgagt ccactaccc gggtgacttc
 180
 atctgtgagg ccatcgacca gaccgcggg tggttttaca ccatgatggc cgtcggaacc
 240
 ctggtgtttg acgagtcctc gtaccgcaat gtgctgtgtc tgggccacat cttggccgag
 300
 gacggtcgca agatgagcaa gcaccttggc aacatcctgt tgcctatccc gtcgatggat
 360
 tcccacgggtg ccgacgcgct gcgttggttc atggcgccg acggctcccc atggagtgca
 420
 cgacgc
 426

<210> 1582

<211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1582
 Asp Pro His Arg Pro Phe Ile Asp Glu Val Thr Phe Thr Arg Glu Gly
 1 5 10 15
 His Thr Tyr His Arg Val Pro Glu Val Ala Asp Ala Trp Leu Asp Ser
 20 25 30
 Gly Ser Met Pro Phe Ala Gln Trp Gly Tyr Pro His Val Pro Gly Ser
 35 40 45
 Lys Glu Lys Phe Glu Ser His Tyr Pro Gly Asp Phe Ile Cys Glu Ala
 50 55 60
 Ile Asp Gln Thr Arg Gly Trp Phe Tyr Thr Met Met Ala Val Gly Thr
 65 70 75 80
 Leu Val Phe Asp Glu Ser Ser Tyr Arg Asn Val Leu Cys Leu Gly His
 85 90 95
 Ile Leu Ala Glu Asp Gly Arg Lys Met Ser Lys His Leu Gly Asn Ile
 100 105 110
 Leu Leu Pro Ile Pro Leu Met Asp Ser His Gly Ala Asp Ala Leu Arg
 115 120 125
 Trp Phe Met Ala Ala Asp Gly Ser Pro Trp Ser Ala Arg Arg
 130 135 140

<210> 1583
 <211> 450
 <212> DNA
 <213> Homo sapiens

<400> 1583
 nnacgcgtga aggggttatgg agatgggttca gggagtaagg aagggtttcag ggatgggttta
 60
 ggggggttctg aggaaatggg gtcaatggat gaggcaggtt ataggaagga tttgggggct
 120
 cctaaggga taggttcagg gagtaaggca ggtttcagg atggtttagg gagttctggg
 180
 gaaatgggg caatggatga ggcagattat aggaaggatt tgggagctcc tgaggaaatg
 240
 gggttcaggca gttacacaga ttacaggaat ggttttaggca gttctggaaa aatcagttca
 300
 ggggatgagg cagggttataa gaatgtttta ggggggttctg ggaggaatcc attagggagc
 360
 gaggcaggtt ctaggggtag tttggaggat tctgggtaca tcttgatcatg gaatgaggca
 420
 gggttctaggc aaggcctttgg gggaactagt
 450

<210> 1584
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 1584
 Xaa Arg Val Lys Gly Tyr Gly Asp Gly Ser Gly Ser Lys Glu Gly Phe

1	5	10	15
Arg Asp Gly	Leu Gly Gly Ser Glu	Glu Met Gly Ser Met	Asp Glu Ala
	20	25	30
Gly Tyr Arg	Lys Asp Leu Gly Ala	Pro Lys Gly Ile Gly	Ser Gly Ser
	35	40	45
Lys Ala Gly	Phe Arg Asp Gly Leu	Gly Ser Ser Gly	Glu Met Gly Ser
	50	55	60
Met Asp Glu	Ala Asp Tyr Arg Lys	Asp Leu Gly Ala	Pro Glu Glu Met
65		70	75
Gly Ser Gly	Ser Tyr Thr Asp Tyr	Arg Asn Gly Leu	Gly Ser Ser Gly
	85	90	95
Lys Ile Ser	Ser Gly Asp Glu Ala	Gly Tyr Lys Asn	Val Leu Gly Gly
	100	105	110
Ser Gly Arg	Asn Pro Leu Gly Ser	Glu Ala Gly Ser	Arg Gly Ser Leu
	115	120	125
Glu Asp Ser	Gly Tyr Ile Leu Ser	Trp Asn Glu Ala	Gly Ser Arg Gln
	130	135	140
Gly Phe Gly	Gly Thr Ser		
145	150		

<210> 1585

<211> 596

<212> DNA

<213> Homo sapiens

<400> 1585

tgatcatctg taattcttgt ccgtgggcgt ttgaactgag aatgtcttaa gaagttggga
 60
 tctaatacga gctgctgctg gcaaagttgg gtgaggtctg cagagagtgc gtccatctgt
 120
 ggcagctgca gggcaagctg gggaggaagc gcagggtggt gcacaggttg catcataatg
 180
 gaaggaaaga gcggcaggtc cagagaaacc ggcctctccc aaaaagttat caaacactgg
 240
 tttagaaata cgctttttta ggaacgacag agaaataaag attcaccata caacttcagt
 300
 aaccctecta taacggtttt agaagatata agaattgatc cacagcccac ctctttagaa
 360
 cattacaaat ctgatgcata attcagtaaa aggtcttcta gaacgagatt tactgactac
 420
 cagcttaggg ttctgcaaga cttttttgac acaaacgctt acccaaaaga tgatgaaata
 480
 gaacaactct ccactgttct caatctgcct acccggttta ttgttgatg gttccagaat
 540
 gctcgtcaga aagcacgaaa gagttatgag aatcaagcag aaacccttc acgcgt
 596

<210> 1586

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1586

Met Glu Gly Lys Ser Gly Arg Ser Arg Glu Thr Gly Leu Ser Gln Lys

```

      1             5             10             15
Val Ile Lys His Trp Phe Arg Asn Thr Leu Phe Lys Glu Arg Gln Arg
      20             25             30
Asn Lys Asp Ser Pro Tyr Asn Phe Ser Asn Pro Pro Ile Thr Val Leu
      35             40             45
Glu Asp Ile Arg Ile Asp Pro Gln Pro Thr Ser Leu Glu His Tyr Lys
      50             55             60
Ser Asp Ala Ser Phe Ser Lys Arg Ser Ser Arg Thr Arg Phe Thr Asp
      65             70             75             80
Tyr Gln Leu Arg Val Leu Gln Asp Phe Phe Asp Thr Asn Ala Tyr Pro
      85             90             95
Lys Asp Asp Glu Ile Glu Gln Leu Ser Thr Val Leu Asn Leu Pro Thr
      100            105            110
Arg Val Ile Val Val Trp Phe Gln Asn Ala Arg Gln Lys Ala Arg Lys
      115            120            125
Ser Tyr Glu Asn Gln Ala Glu Thr Pro Ser Arg
      130            135

```

<210> 1587

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1587

```

tgtacacaca gtgatttggg gtcctttttc ctaaaacagc ttctttatca ggactttgga
60
attctgggtg agatagaaac actgaaaaca gggcggaagt tttttcttct ggcttcttag
120
tccacggagg gtcacgcgtg gagaggatat gccgtggcat tctccctggg agaccacaca
180
tgttcccgac agctcagacc ccagaccgca tgtgctcctg acagctcaga cccagaccg
240
cgcgtgctcc tgacagctca gaccccagac cgcaggtgct cccgacagct cagaccccag
300
accgcgggtg ctctgacag ctcagacccc agaccgcgcg tgctcccgac agctcagacc
360
ccagaccgcg ggtgctcctg acagctcaga cccagaccg cgcgtgctcc cgacagctca
420
gaccccagac cgcgggtgct cctgacagct cagaccccag accgcgggtg ctctgacag
480
ctcagacccc agaccacgcg t
501

```

<210> 1588

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1588

```

Ser Thr Glu Gly Ser Ala Trp Arg Gly Tyr Ala Val Ala Phe Ser Leu
      1             5             10             15
Gly Asp His Thr Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Cys Ala
      20             25             30
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Leu Thr Ala Gln Thr

```

```

          35          40          45
Pro Asp Arg Arg Cys Ser Arg Gln Leu Arg Pro Gln Thr Ala Gly Ala
   50          55          60
Pro Asp Ser Ser Asp Pro Arg Pro Arg Val Leu Pro Thr Ala Gln Thr
65          70          75          80
Pro Asp Arg Gly Cys Ser
          85

```

<210> 1589

<211> 407

<212> DNA

<213> Homo sapiens

<400> 1589

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aagcttgctg gggacacct ttttacgggg cctcgtgggg gaggagttac ctgcattgac
60
tccaccgggt ccactaacgc cgacatggct gctttcgtgc gagcaggggg aacgtctttc
120
tgcctactcg ttgctgacca ccaagagggc gggcgtggac ggttcacgcg cagttggcag
180
gatgtccccg gtacgagttt ggcgatctca gcgttggtgc ccaatgateg tccgtcgcag
240
gactggggct ggctgtcgat ggttgcgggg ctcgctgttg tcaaggtcat caaggaggtc
300
ggtggggctg accgttcccc agtgacgctg aagtggccca atgatgtgct cgtggatctg
360
gacactgacc agggcggcaa agtgtgcgga attctctcag aacgcgt
407

```

<210> 1590

<211> 135

<212> PRT

<213> Homo sapiens

<400> 1590

```

Lys Leu Ala Gly Asp Thr Leu Phe Thr Gly Pro Arg Gly Gly Gly Val
 1          5          10          15
Thr Cys Ile Asp Ser Thr Gly Ser Thr Asn Ala Asp Met Ala Ala Phe
20          25          30
Val Arg Ala Gly Gly Thr Ser Phe Cys Leu Leu Val Ala Asp His Gln
35          40          45
Glu Gly Gly Arg Gly Arg Phe Thr Arg Ser Trp Gln Asp Val Pro Gly
50          55          60
Thr Ser Leu Ala Ile Ser Ala Leu Val Pro Asn Asp Arg Pro Ser Gln
65          70          75          80
Asp Trp Gly Trp Leu Ser Met Val Ala Gly Leu Ala Val Val Lys Val
85          90          95
Ile Lys Glu Val Gly Gly Ala Asp Arg Ser Arg Val Thr Leu Lys Trp
100          105          110
Pro Asn Asp Val Leu Val Asp Leu Asp Thr Asp Gln Gly Gly Lys Val
115          120          125
Cys Gly Ile Leu Ser Glu Arg
130          135

```

<210> 1591
 <211> 424
 <212> DNA
 <213> Homo sapiens

<400> 1591
 agatctctct ccctgagata acccaggctt tagaaccaaa gagctgagag accctgtccc
 60
 ttcagagagg cacttgcacc tagaggagtc tctgggaagc agatggggat atgggacaga
 120
 cgcattcttga aaaagccccc agatgcctcc ctatggagga cctcaccac ccacatcacc
 180
 agtagggagc ttgggactta ccctaaccac aggggggtga ctgttgtcgt ccctgcacag
 240
 aacgtccagc gaggcttgac ttccagccg ctgcgcttca tccaggagca cgtcctgac
 300
 cctgtctttg acctcagcgg cccagcagc ctggcccagc ctgtccagta ctcccttgac
 360
 tgtgggatcc ctggctgctc acgcccctga ggaccctcgt gatctgctcc agcacgtgaa
 420
 attt
 424

<210> 1592
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 1592
 Met Gly Ile Trp Asp Arg Arg Ile Leu Lys Lys Pro Pro Asp Ala Ser
 1 5 10 15
 Leu Trp Arg Thr Ser Pro Thr His Ile Thr Ser Arg Glu Leu Gly Thr
 20 25 30
 Tyr Pro Asn His Arg Gly Val Thr Val Val Val Pro Ala Gln Asn Val
 35 40 45
 Gln Arg Val Leu Thr Phe Gln Pro Leu Arg Phe Ile Gln Glu His Val
 50 55 60
 Leu Ile Pro Val Phe Asp Leu Ser Gly Pro Ser Ser Leu Ala Gln Pro
 65 70 75 80
 Val Gln Tyr Ser Leu Asp Cys Gly Ile Pro Gly Cys Ser Arg Pro
 85 90 95

<210> 1593
 <211> 1678
 <212> DNA
 <213> Homo sapiens

<400> 1593
 cttgaatcta aaataaatga aataaacaca gaaattaacc agttgattga aaagaaaatg
 60
 atgagaaatg agccattga aggcaaactc tcaactgtata ggcaacaggc atctatcatt
 120
 tcccgtaaaa aagaagccaa agctgaggaa cttcaggagg ccaaggagaa gtttagccagc
 180

ctagagagag aagcatcagt aaagagaaat cagaccctg aatttgatgg tactgaagtt
240
ttaaaggagg atgagttcaa acgatatgtc aataaacttc gaagcaagag tacagttttc
300
aaaaagaagc atcacataat agctgaactt aaagctgaat tcggtctttt gcagaggact
360
gaagaacttc ttaagcaacg tcatgaaaat attcaacaac aactgcaaac tatggaggag
420
aaaaagggtg tatctggata tagttacacc caagaagagc tagaaagagt atctgcactg
480
aagagtgaag ttgatgaaat gaaaggacga acattggatg atatgtctga aatggtgaaa
540
aaactgtatt cattgggtatc tgaaaagaag tcagctcttg cctcagttat aaaagagcta
600
cgacagttgc gtcaaaaaata tcaagaactg acccaggagt gtgatgaaaa gaaatcccag
660
tatgatagct gtgcagcagg cctcgaaagc aatcggtcca aattagaaca ggaagttaga
720
agactccgtg aagaatgtct tcaagaagaa agtagatacc attatacaaa ttgtatgatt
780
aagaacctag aagttcaact tcgtcgtgct actgatgaga tgaaggcata tatctcttct
840
gatcaacaag aaaaaagaaa ggcaattagg gaacagtata ccaaaaatac tgctgaacaa
900
gaaaaccttg gaaagaaact tcgggaaaaa caaaaagtta tacgagaaaag tcatgggtcca
960
aatatgaaac aagcaaaaat gtggcgtgat ttggaacaat taatggaatg taagaaacag
1020
tgctttctga aacaacaaag ccaaaacttc attggtcagg taattcagga ggggtggggag
1080
gaccggctaa tactgtgaat tcttgtgtca tcgtttgggg ttttacttga taccactagc
1140
tataagccta atctcataat gtatttcttt ttgaaaactg atttgttttag cattttgttt
1200
tcagaagagc cattctttat taagttttca tagaaaataa tgtaaggta gatttagttt
1260
gaatgttttt tcatatgaaa aagaggcttt tattcttttc catagtttag acatcactgg
1320
cgtcttctga gttttatgag acaggaaact aagtttacta tctgtaaatg taaacatatg
1380
tccattaaga aacatgtagt ttttttttag aatgtaataa cccagtggct tactgttttt
1440
cttaatctct tttaaaaaaa ctttagaaga atcttttagg aactaatatc tcttgttctg
1500
aagaacatt tatctgacgt tcagcagttc ctacagtttt acttcagttt atttttcttc
1560
tgtaaaatgc aagaaaattt aatattttga ctaacatgtc ttttctgttt gtatcattta
1620
aaggcaaata aacttggtag gtatttcata tctatttaaa aaatgaaaaa aaaaaaaa
1678

<210> 1594

<211> 365

<212> PRT

<213> Homo sapiens

<400> 1594

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Leu Glu Ser Lys Ile Asn Glu Ile Asn Thr Glu Ile Asn Gln Leu Ile
 1          5          10          15
Glu Lys Lys Met Met Arg Asn Glu Pro Ile Glu Gly Lys Leu Ser Leu
 20          25          30
Tyr Arg Gln Gln Ala Ser Ile Ile Ser Arg Lys Lys Glu Ala Lys Ala
 35          40          45
Glu Glu Leu Gln Glu Ala Lys Glu Lys Leu Ala Ser Leu Glu Arg Glu
 50          55          60
Ala Ser Val Lys Arg Asn Gln Thr Arg Glu Phe Asp Gly Thr Glu Val
 65          70          75          80
Leu Lys Gly Asp Glu Phe Lys Arg Tyr Val Asn Lys Leu Arg Ser Lys
 85          90          95
Ser Thr Val Phe Lys Lys Lys His His Ile Ile Ala Glu Leu Lys Ala
 100         105         110
Glu Phe Gly Leu Leu Gln Arg Thr Glu Glu Leu Leu Lys Gln Arg His
 115         120         125
Glu Asn Ile Gln Gln Gln Leu Gln Thr Met Glu Glu Lys Lys Gly Ile
 130         135         140
Ser Gly Tyr Ser Tyr Thr Gln Glu Glu Leu Glu Arg Val Ser Ala Leu
 145         150         155         160
Lys Ser Glu Val Asp Glu Met Lys Gly Arg Thr Leu Asp Asp Met Ser
 165         170         175
Glu Met Val Lys Lys Leu Tyr Ser Leu Val Ser Glu Lys Lys Ser Ala
 180         185         190
Leu Ala Ser Val Ile Lys Glu Leu Arg Gln Leu Arg Gln Lys Tyr Gln
 195         200         205
Glu Leu Thr Gln Glu Cys Asp Glu Lys Lys Ser Gln Tyr Asp Ser Cys
 210         215         220
Ala Ala Gly Leu Glu Ser Asn Arg Ser Lys Leu Glu Gln Glu Val Arg
 225         230         235         240
Arg Leu Arg Glu Glu Cys Leu Gln Glu Glu Ser Arg Tyr His Tyr Thr
 245         250         255
Asn Cys Met Ile Lys Asn Leu Glu Val Gln Leu Arg Arg Ala Thr Asp
 260         265         270
Glu Met Lys Ala Tyr Ile Ser Ser Asp Gln Gln Glu Lys Arg Lys Ala
 275         280         285
Ile Arg Glu Gln Tyr Thr Lys Asn Thr Ala Glu Gln Glu Asn Leu Gly
 290         295         300
Lys Lys Leu Arg Glu Lys Gln Lys Val Ile Arg Glu Ser His Gly Pro
 305         310         315         320
Asn Met Lys Gln Ala Lys Met Trp Arg Asp Leu Glu Gln Leu Met Glu
 325         330         335
Cys Lys Lys Gln Cys Phe Leu Lys Gln Gln Ser Gln Thr Ser Ile Gly
 340         345         350
Gln Val Ile Gln Glu Gly Gly Glu Asp Arg Leu Ile Leu
 355         360         365

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<210> 1595

<211> 559

<212> DNA

<213> Homo sapiens

<400> 1595
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 gcatggccgg ggagccgccc acttggcgag gaacaggctc catagcgacc tcagaacact
 120
 ggtgctgggg cccagccagg gagagcatct tcccgtctggg accttccccg gggcggtca
 180
 tcccttgagg atgtaggggtg cagctgagat ggtggcgggc ccattcctgc tgttcgccag
 240
 cctgggctgg gggtagtagg atcacccctt ggtgatgag gagccccggg cttgggcagt
 300
 taccaagtgg ggggtcacag tctggaaagt ggtggaacca agggagcggc ctcgcccagg
 360
 ccacactctc aaatactggc cctcgacaaa aggcagctgg gctctcaaga cagggccacc
 420
 tcctctctgc tgggcccgcg cccgtggaga gcaagtggga actgacccta tcttctgtcc
 480
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 540
 gcccaactgga ggaacgcgt
 559

<210> 1596
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1596
 Met Leu Ala Leu Gln Ala Gly Thr Glu Asp Arg Val Ser Ser His Leu
 1 5 10 15
 Leu Ser Thr Gly Ala Gly Pro Ala Glu Arg Arg Trp Pro Cys Leu Glu
 20 25 30
 Ser Pro Ala Ala Phe Cys Arg Gly Pro Val Phe Glu Ser Val Ala Trp
 35 40 45
 Ala Arg Pro Leu Pro Trp Phe His His Phe Pro Asp Cys Asp Pro Pro
 50 55 60
 Leu Gly Asn Cys Pro Arg Pro Gly Leu Leu Ile Ser Pro Arg Val Ile
 65 70 75 80
 Leu Val Pro Pro Ala Gln Ala Gly Glu Gln Gln Glu Trp Gly Arg His
 85 90 95
 His Leu Ser Cys Thr Leu His Leu Gln Gly Met Ser Arg Pro Gly Glu
 100 105 110
 Gly Pro Ser Gly Lys Met Leu Ser Leu Ala Gly Pro Gln His Gln Cys
 115 120 125
 Ser Glu Val Ala Met Glu Pro Val Pro Arg Gln Val Gly Gly Ser Pro
 130 135 140
 Ala Met Pro His Gln Ala Ala Leu Pro Gln Glu Glu Lys Gln Val Trp
 145 150 155 160
 Ala Cys Glu Arg Asp Arg
 165

<210> 1597
 <211> 609

<212> DNA

<213> Homo sapiens

<400> 1597

tcgtcaacgg aaacttcggc cttcgggcct acccataatc cttggggacct tgaacgggta
 60
 ccgggtgggt ccggtgggtg ttcagcagct agcttggtt cctttcaggc cccgttggt
 120
 ttgggcactg ataccggggg ctcgatccgc caacctggag cggtgaccgg caccgtcggg
 180
 atcaagccga cctacgggtc gacctccga tacggcggtta togtatggc ttcattcttg
 240
 gatactcctg ggccctgcgc ccgtaccgtc cttgacgccg cgttgctcca tcaggccatt
 300
 gccggtcacg acgctatgga ccagaccacg attaatacag ccaccccggc ggtcgttgag
 360
 gctgcgcggc aggcagacgt ttccgggggtg cgcattggcg ttgtcacgga gttgagcggg
 420
 cagggttacg accctcaggt cgaggcccg ttccacgagg ctgtcgagat gctaatagag
 480
 gcgggggctg aggtcgttga ggtctcttgc ccgaactttg acctcgctt acctgcttat
 540
 taccttattc agcctgccga ggtgtctagc aacctggctc gttacgacgc catgcgttac
 600
 ggcttacgc
 609

<210> 1598

<211> 203

<212> PRT

<213> Homo sapiens

<400> 1598

Ser	Ser	Thr	Glu	Thr	Ser	Ala	Phe	Gly	Pro	Thr	His	Asn	Pro	Trp	Asp
1				5					10					15	
Leu	Glu	Arg	Val	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Ser	Ala	Ala	Ser	Leu
			20					25					30		
Ala	Ser	Phe	Gln	Ala	Pro	Leu	Ala	Leu	Gly	Thr	Asp	Thr	Gly	Gly	Ser
		35					40					45			
Ile	Arg	Gln	Pro	Gly	Ala	Val	Thr	Gly	Thr	Val	Gly	Ile	Lys	Pro	Thr
	50					55					60				
Tyr	Gly	Ser	Thr	Ser	Arg	Tyr	Gly	Val	Ile	Ala	Met	Ala	Ser	Ser	Leu
65					70					75				80	
Asp	Thr	Pro	Gly	Pro	Cys	Ala	Arg	Thr	Val	Leu	Asp	Ala	Ala	Leu	Leu
				85					90					95	
His	Gln	Ala	Ile	Ala	Gly	His	Asp	Ala	Met	Asp	Gln	Thr	Thr	Ile	Asn
			100					105					110		
Gln	Pro	Thr	Pro	Ala	Val	Val	Glu	Ala	Ala	Arg	Gln	Ala	Asp	Val	Ser
		115					120					125			
Gly	Val	Arg	Ile	Gly	Val	Val	Thr	Glu	Leu	Ser	Gly	Gln	Gly	Tyr	Asp
	130					135					140				
Pro	Gln	Val	Glu	Ala	Arg	Phe	His	Glu	Ala	Val	Glu	Met	Leu	Ile	Glu
145					150					155					160
Ala	Gly	Ala	Glu	Val	Val	Glu	Val	Ser	Cys	Pro	Asn	Phe	Asp	Leu	Ala

```

<400> 1600
Met His Val Asn Thr Trp Met Ala Gly Met Leu Ser Val Thr Gly Gly
  1              5              10              15
Val Asp Pro Ala Ser Gly Ala Gly Pro Ala Val Tyr Ser Ala Pro Phe
          20              25              30
Val Glu Glu Ser Cys Lys Ala Leu Val Leu Phe Ala Leu Ala Ile Gly
          35              40              45
Met Gly Arg Arg Met Thr Ser Val Val Gln Thr Val Ser Met Ala Gly
          50              55              60
Leu Ser Ala Ile Gly Phe Ala Phe Val Glu Asn Ile Met Tyr Tyr Ala
65          70              75              80
Arg Ala Asp Asn Tyr Ala Arg Val Thr Ala Ser Gly Gly Asp Pro Lys
          85              90              95
Gln Gly Val Asp Glu Val Gly Ala Val Ala Gly Ser Val Cys Leu Val
          100             105             110
Trp Ala Ser Ala Val His Gln His Asp Gly Tyr Arg Ser Gly Pro Trp
          115             120             125
Ala Glu Val Thr Lys Leu

```

130

<210> 1601

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1601

```

gccggccgcc ccgtttccgc agattctgga ggagtgccga tggccgagtt catctacacc
60
atgcacaacg tccgaaaggc ggtgggtgac aaagttatcc ttgacaatgt cacgctgtcg
120
ttcttcccgg gcgccaagat tgggtgtgtc ggaccgaatg gcgctggcaa atcgacgatg
180
ctcaagctca tggctggtct cgataagccc aataacggcg atgccaactt ggctaaaggc
240
gccaccgtcg gaatcttget tcaggagccc ccgctcaccg aggacaaaac tgttcgcgag
300
aacgtcgaag aggccgtcgg cgacatcaaa gccaaactgg cacggttcga ggaagtctcc
360
gccgagatgg ccaaccctga cgccgacttt gacgcctga tggcggagat ggggtgagctg
420
cagaccgagc tcgataacgc caacgcg
447

```

<210> 1602

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1602

```

Met Ala Glu Phe Ile Tyr Thr Met His Asn Val Arg Lys Ala Val Gly
 1             5             10             15
Asp Lys Val Ile Leu Asp Asn Val Thr Leu Ser Phe Phe Pro Gly Ala
      20             25             30
Lys Ile Gly Val Val Gly Pro Asn Gly Ala Gly Lys Ser Thr Met Leu
      35             40             45
Lys Leu Met Ala Gly Leu Asp Lys Pro Asn Asn Gly Asp Ala Asn Leu
      50             55             60
Ala Lys Gly Ala Thr Val Gly Ile Leu Leu Gln Glu Pro Pro Leu Thr
65             70             75             80
Glu Asp Lys Thr Val Arg Glu Asn Val Glu Glu Ala Val Gly Asp Ile
      85             90             95
Lys Ala Lys Leu Ala Arg Phe Glu Glu Val Ser Ala Glu Met Ala Asn
      100            105            110
Pro Asp Ala Asp Phe Asp Ala Leu Met Ala Glu Met Gly Glu Leu Gln
      115            120            125
Thr Glu Leu Asp Asn Ala Asn Ala
      130            135

```

<210> 1603

<211> 540

<212> DNA

<213> Homo sapiens

<400> 1603

acgcgtaagc tcaccgaagc catgatggca atgctgctgg aactgcatta cagcaagcag
 60
 gaaatccttg aggcgtaact caacgaggtc ttcgtcgggc aggatggcca gcgcgccgtg
 120
 cacgggtttg gcttgccag tcagttcttc tttggccagc ctttggtccga gctgaagttg
 180
 catcaagtcg cgttggttgg cgggatgggc aaggggccgt cctattacaa cccgcggcgc
 240
 aatccggaac gtgcgctcga gcgtcgtaac ctggtgctgg atgtgctgga acagcagggg
 300
 gtagccactg ccgaacaagt cgctgccgca aagaaaatgc cgctgggtgt aaccactcgc
 360
 ggcaagctgg cggacagctc ctteccaggc tttatcgacc tgggtcaaacg ccagttgcgt
 420
 gaagattacc gcgacgaaga cttgaccgaa gaaggcctgc ggattttcac cagtttcgac
 480
 ccgattctgc agatgaaagc cgaagcatcg gtgaacgaca cattcaagcg cctgaccggc
 540

<210> 1604

<211> 180

<212> PRT

<213> Homo sapiens

<400> 1604

Thr	Arg	Lys	Leu	Thr	Glu	Ala	Met	Met	Ala	Met	Leu	Leu	Glu	Leu	His
1				5					10					15	
Tyr	Ser	Lys	Gln	Glu	Ile	Leu	Glu	Ala	Tyr	Leu	Asn	Glu	Val	Phe	Val
			20					25					30		
Gly	Gln	Asp	Gly	Gln	Arg	Ala	Val	His	Gly	Phe	Gly	Leu	Ala	Ser	Gln
		35					40					45			
Phe	Phe	Phe	Gly	Gln	Pro	Leu	Ser	Glu	Leu	Lys	Leu	His	Gln	Val	Ala
	50					55					60				
Leu	Leu	Val	Gly	Met	Val	Lys	Gly	Pro	Ser	Tyr	Tyr	Asn	Pro	Arg	Arg
65					70					75				80	
Asn	Pro	Glu	Arg	Ala	Leu	Glu	Arg	Arg	Asn	Leu	Val	Leu	Asp	Val	Leu
			85						90					95	
Glu	Gln	Gln	Gly	Val	Ala	Thr	Ala	Glu	Gln	Val	Ala	Ala	Ala	Lys	Lys
			100					105						110	
Met	Pro	Leu	Gly	Val	Thr	Thr	Arg	Gly	Lys	Leu	Ala	Asp	Ser	Ser	Phe
			115				120					125			
Pro	Gly	Phe	Ile	Asp	Leu	Val	Lys	Arg	Gln	Leu	Arg	Glu	Asp	Tyr	Arg
			130				135					140			
Asp	Glu	Asp	Leu	Thr	Glu	Glu	Gly	Leu	Arg	Ile	Phe	Thr	Ser	Phe	Asp
145					150					155				160	
Pro	Ile	Leu	Gln	Met	Lys	Ala	Glu	Ala	Ser	Val	Asn	Asp	Thr	Phe	Lys
				165					170					175	
Arg	Leu	Thr	Gly												
			180												

<210> 1605

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1605

```

acgcgttggg gcggtcggtc gcacgcagtc cgtccaagag gtacaggcca gcgttgccgc
60
cattctttgc gggcgggatc tgcactggga tattgcggcc catcgctgt gaccacacat
120
cgacgcgtg gacccaccag cccacctggt cccactcgca cgtgccagta ctgtccgcac
180
gcaagaaatc gcggtgagct gcgtgcgcct gctgggtgcc gcctgccact acggcaagac
240
ccagcgctac ggcgactgcc atgatgaccg aaaggacgag acccctaata gatgcagtca
300
tctttctect tcacaaagta tttggttaatt gtcacttagc tttatcgctc ggaatctgtg
360
aaccgttaac atcccgcagc ggaagctaac tagcaagcag tctaatagcac tcccgggcca
420
aatgttg
427

```

<210> 1606

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1606

```

Met Thr Ala Ser Ile Arg Gly Arg Val Leu Ser Val Ile Met Ala Val
1      5      10      15
Ala Val Ala Leu Gly Leu Ala Val Val Ala Gly Gly Thr Gln Gln Ala
20      25      30
His Ala Ala His Arg Asp Phe Leu Arg Ala Asp Ser Thr Gly Thr Cys
35      40      45
Glu Trp Asp Gln Val Gly Trp Trp Val Gln Arg Cys Asp Val Trp Ser
50      55      60
Gln Ala Met Gly Arg Asn Ile Pro Val Gln Ile Pro Pro Ala Lys Asn
65      70      75      80
Gly Gly Asn Ala Gly Leu Tyr Leu Leu Asp Gly Leu Arg Ala Thr Asp
85      90      95
Arg Thr Asn Ala
100

```

<210> 1607

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1607

```

gcacggctcc gctcgcggcc gccgtgatgg tacataccgg cgcgaccgtg atcgattctt
60
tgccgcaagg caatttactt ccacgtcacg gccgatgcga tgaagatgac gattcgtaaa
120
cggatgggac tgatcccgtg cgaggcgatc gtgggcggga cgatgatgat cgtggcgacg
180

```

ttgctgtacg gattcatttt gtagcataaa taaggagggg ttcgatgaac aggaaaaccc ,
 240
 tttctgttg caccgattc gttcaaggaa agcatgacgg caaaagaagt ctgtatcgcg
 300
 atggaaaaag gactgagccg cgtctacccc gacgcccggg ttatccatgt gccgatggcg
 360
 gacggaggcg aaggcacggg gcagtcgctg gtcgac
 396

<210> 1608

<211> 56

<212> PRT

<213> Homo sapiens

<400> 1608

Thr	Gly	Lys	Pro	Phe	Leu	Leu	Ala	Pro	Asp	Ser	Phe	Lys	Glu	Ser	Met
1				5				10					15		
Thr	Ala	Lys	Glu	Val	Cys	Ile	Ala	Met	Glu	Lys	Gly	Leu	Ser	Arg	Val
		20					25					30			
Tyr	Pro	Asp	Ala	Arg	Phe	Ile	His	Val	Pro	Met	Ala	Asp	Gly	Gly	Glu
	35					40					45				
Gly	Thr	Val	Gln	Ser	Leu	Val	Asp								
	50					55									

<210> 1609

<211> 505

<212> DNA

<213> Homo sapiens

<400> 1609

acgcgtagat gccacagcgc caggacacac gccaccgcgg agccgaggat gatccacatg
 60
 ggctcgactc acatggacgc catggattcg gcagtggaga gcaggccgcg agcttcgcac
 120
 gcggcccgac tgcgtagtcg cgtcatctca gtgcacatct gttcttcccc gtcgatgagg
 180
 ttcgcggcgt aggacatcgt tacgtccagc atggtggcga tctcagcaat gtcacagccg
 240
 gccttggtga gggcgaggag ccgagcgcgc gtgcttctctg ctggcacgat gcgttcacgt
 300
 gctgcgttga tgcgctcgat actgatatgc aggatgcgcc cggggctcgaa gacggggaat
 360
 ggggtgaatt ggacgggtccc ccctggccag cgagtcgttg gacgattcga ctggggacat
 420
 gcgcgagcag ggcgacgaca cgccacggaa cgcggcattc atggacgagg gaacggacat
 480
 ggagcgagaa aaagcgggcg tcgac
 505

<210> 1610

<211> 129

<212> PRT

<213> Homo sapiens

<400> 1610

```

Met Pro Arg Ser Val Ala Cys Arg Arg Pro Ala Arg Ala Cys Pro Gln
 1           5           10           15
Ser Asn Arg Pro Thr Thr Arg Trp Pro Gly Gly Thr Val Gln Phe Thr
      20           25           30
Pro Phe Pro Val Phe Asp Pro Gly Arg Ile Leu His Ile Ser Ile Asp
      35           40           45
Asp Ile Asn Ala Ala Arg Glu Arg Ile Val Pro Ala Gly Ser Thr Arg
      50           55           60
Ala Arg Leu Leu Ala Leu His Lys Ala Gly Cys Asp Ile Ala Glu Ile
      65           70           75           80
Ala Thr Met Leu Asp Val Thr Met Ser Tyr Ala Ala Asn Leu Met Ser
      85           90           95
Gly Glu Glu Gln Met Cys Thr Glu Met Thr Arg Leu Arg Ser Arg Ala
      100          105          110
Ala Cys Glu Ala Arg Gly Leu Leu Ser Thr Ala Glu Ser Met Ala Ser
      115          120          125
Met

```

<210> 1611

<211> 532

<212> DNA

<213> Homo sapiens

<400> 1611

```

acgcgtgctg cgtttacagt tgcgtctatt gatttaggtg cgcattccaga atttttagga
60
aaaaatgata ttcaattagg caaaaaagaa tctgtagagg atactgcgaa agtattaggt
120
agaatgttcg atgggtattga attccgtggt ttttcacaac aagctggtga agatttagcg
180
aagttctctg gtgtaccggg gtggaatgga ttaacagacg attggcatcc tacacaaatg
240
ttagctgatt ttatgacaat aaaagagaat tttggatatc tagaaggaat aaacttaact
300
tacgttggag atggacgtaa taatattgcg cattcattaa tggtagcagg tgctatgtta
360
ggtgttaatg taagaatttg tacacctaaa tcattaaatc caaaagaggc atatgttgat
420
attgcaaaag aaaaagcgag tcaatatggt gggttcagtca tgattacgga taatattgca
480
gaagcagttg aaaatacaga tgctatatat acagatgttt gggtatcgac gg
532

```

<210> 1612

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1612

```

Thr Arg Ala Ala Phe Thr Val Ala Ser Ile Asp Leu Gly Ala His Pro
 1           5           10           15
Glu Phe Leu Gly Lys Asn Asp Ile Gln Leu Gly Lys Lys Glu Ser Val

```


20							25					30				
Glu	Asp	Thr	Ala	Lys	Val	Leu	Gly	Arg	Met	Phe	Asp	Gly	Ile	Glu	Phe	
35							40					45				
Arg	Gly	Phe	Ser	Gln	Gln	Ala	Gly	Glu	Asp	Leu	Ala	Lys	Phe	Ser	Gly	
50							55					60				
Val	Pro	Gly	Trp	Asn	Gly	Leu	Thr	Asp	Asp	Trp	His	Pro	Thr	Gln	Met	
65							70					75				
Leu	Ala	Asp	Phe	Met	Thr	Ile	Lys	Glu	Asn	Phe	Gly	Tyr	Leu	Glu	Gly	
85							90					95				
Ile	Asn	Leu	Thr	Tyr	Val	Gly	Asp	Gly	Arg	Asn	Asn	Ile	Ala	His	Ser	
100							105					110				
Leu	Met	Val	Ala	Gly	Ala	Met	Leu	Gly	Val	Asn	Val	Arg	Ile	Cys	Thr	
115							120					125				
Pro	Lys	Ser	Leu	Asn	Pro	Lys	Glu	Ala	Tyr	Val	Asp	Ile	Ala	Lys	Glu	
130							135					140				
Lys	Ala	Ser	Gln	Tyr	Gly	Gly	Ser	Val	Met	Ile	Thr	Asp	Asn	Ile	Ala	
145							150					155				
Glu	Ala	Val	Glu	Asn	Thr	Asp	Ala	Ile	Tyr	Thr	Asp	Val	Trp	Val	Ser	
165							170					175				
Thr																

```
<210> 1613
<211> 584
<212> DNA
<213> Homo sapiens
```

```

<400> 1613
nnacgcggttc agccgagaaaa tatgctgctt tttgcctgcc acctcacaaa tgctacggga
60
cagggcggtcc aggtttttgcg cctcctggta cgttgetaca cacttgctca cctcccagcg
120
gtatcaatac aacttgcgaa atgcagacaa ggcccaggcc taagacatgg tagacataca
180
tatatacaag gaattcacta tatattgggt gaaaggagat cttcccgttc ctgttcttcc
240
tctgccgcat cctgtgaagc gttcaggag gtcgacatgg ataatgtgcg tatgctggc
300
acggtaaaagt gtcgcgggct tgtagatgcg tgtgaacgtt ttcgtgactt gaagaggtcg
360
aagctgatgt gttcgcgtga gtcgatgca gcgcgctgcg ttgctgacct tgtggctgat
420
cgtcgccccg atccgataga atgcggagtt gtattttcgt agtactgctc gacaatgcca
480
gtgggcgagg cgatgagttc ctcatattgcg tctttctcga ggtcttggtc catgtccata
540
aacataccaa agctggatgg gtcatacgac ggcgagcat gcat
584

```

```
<210> 1614
<211> 153
<212> PRT
<213> Homo sapiens
```

<400> 1614

```

Xaa Arg Val Gln Pro Arg Asn Met Leu Leu Phe Ala Cys His Leu Thr
 1           5           10           15
Asn Ala Thr Ala Gln Gly Val Gln Val Leu Arg Leu Leu Val Arg Cys
      20           25           30
Tyr Thr Leu Ala His Leu Pro Ala Val Ser Ile Gln Leu Ala Lys Cys
      35           40           45
Arg Gln Gly Pro Gly Leu Arg His Gly Arg His Thr Tyr Ile Gln Gly
      50           55           60
Ile His Tyr Ile Leu Gly Glu Arg Arg Ser Ser Arg Ser Cys Ser Ser
65           70           75           80
Ser Ala Ala Ser Cys Glu Ala Phe Arg Glu Val Asp Met Asp Asn Val
      85           90           95
Arg Met Pro Gly Thr Val Lys Cys Arg Gly Leu Val Asp Ala Cys Glu
      100          105          110
Arg Phe Arg Asp Leu Lys Arg Ser Lys Leu Met Cys Ser Arg Glu Leu
      115          120          125
Asp Ala Ala Arg Cys Val Ala Cys Leu Val Val Asp Arg Arg Pro Asp
      130          135          140
Pro Ile Glu Cys Gly Val Val Phe Ser
145           150

```

<210> 1615

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1615

```

gccggcttgcc ccgacgcgtc tatgggtgat gttctgtcct ctgtcgtcgg gccgtggggc
60
tcggtgcttg tcagtgcctg tgtcatcatt tccctgcttg gggctctact ggctgggac
120
ctactgtgcg gtgagacgat gcaggtgccg ggtgaggacg gcaccatgcc gaaactgttc
180
ggacggatca acaaacatga ggctccagct cccgctttgt ggatcaccaa catcgtctcc
240
cagatatgcc ttgtcatgac ggtgttgctg gacgggtgctt acttggcgat ggcgaccctg
300
gctgcgcgcc tcatcctggt gccgtacctg ctgtcagccg cattcgccct gaagatgggtg
360
atc
363

```

<210> 1616

<211> 121

<212> PRT

<213> Homo sapiens

<400> 1616

```

Ala Gly Leu Pro Asp Ala Ser Met Gly Asp Val Leu Ser Ser Val Val
 1           5           10           15
Gly Pro Trp Gly Ser Val Leu Val Ser Ala Gly Val Ile Ile Ser Leu
      20           25           30
Leu Gly Ala Leu Leu Ala Trp Ile Leu Leu Cys Gly Glu Thr Met Gln

```

```

          35          40          45
Val Pro Gly Glu Asp Gly Thr Met Pro Lys Leu Phe Gly Arg Ile Asn
          50          55          60
Lys His Glu Ala Pro Ala Pro Ala Leu Trp Ile Thr Asn Ile Val Ser
65          70          75          80
Gln Ile Cys Leu Val Met Thr Val Leu Trp Asp Gly Ala Tyr Leu Ala
          85          90          95
Met Ala Thr Leu Ala Ala Ala Leu Ile Leu Val Pro Tyr Leu Leu Ser
          100          105          110
Ala Ala Phe Ala Leu Lys Met Val Ile
          115          120

```

<210> 1617

<211> 447

<212> DNA

<213> Homo sapiens

<400> 1617

```

accggtgact acctgtggga gaagaagggc atcggtccca tcctcaagat tgataagggc
60
ctggctgacg agggctgccca cgttcgtctc atgaagccga ttcccggcct cgacgagttg
120
gtgcaccgcg ccgtcgagga gaagcacatc ttcggtacca aggagcgctc tgtcatcctg
180
gatgacgaca aagctggcat cgaaaagatt gtcgaccagc agttcgaact ggccgaacag
240
gtgcgcgctg cgggtcttgt gccgatcctc gaacccgagg tcgacatcca cgctccacat
300
aaggagaagg ctgaggaaaag gctgcacaac ctcattccgcg agcacatcga ctctctgccg
360
ctcgacgcca agatcatggt gaagctgacg atcccagatt ccgaagacct gtatgccgac
420
ctcattgcgg atccgaaggt cctacgc
447

```

<210> 1618

<211> 149

<212> PRT

<213> Homo sapiens

<400> 1618

```

Thr Gly Asp Tyr Leu Trp Glu Lys Lys Gly Ile Val Pro Ile Leu Lys
1          5          10          15
Ile Asp Lys Gly Leu Ala Asp Glu Gly Cys His Val Arg Leu Met Lys
          20          25          30
Pro Ile Pro Gly Leu Asp Glu Leu Val His Arg Ala Val Glu Glu Lys
          35          40          45
His Ile Phe Gly Thr Lys Glu Arg Ser Val Ile Leu Asp Asp Asp Lys
          50          55          60
Ala Gly Ile Glu Lys Ile Val Asp Gln Gln Phe Glu Leu Ala Glu Gln
65          70          75          80
Val Arg Ala Ala Gly Leu Val Pro Ile Leu Glu Pro Glu Val Asp Ile
          85          90          95
His Ala Pro His Lys Glu Lys Ala Glu Glu Arg Leu His Asn Leu Ile

```

```

      100      105      110
Arg Glu His Ile Asp Ser Leu Pro Leu Asp Ala Lys Ile Met Leu Lys
      115      120      125
Leu Thr Ile Pro Ser Ser Glu Asp Leu Tyr Ala Asp Leu Ile Ala Asp
      130      135      140
Pro Lys Val Leu Arg
145

<210> 1619
<211> 355
<212> DNA
<213> Homo sapiens

<400> 1619
nnggtaccga aaccctgtgtc gctaccgcat aaaatcaaag gaactagtat gcataacgta
60
acaacaaatg gtgcctccat tcccgcctt ggccttggca ctttccgtat gcccggcgaa
120
gatgtgcttc gcacgtccc ttacgcgtc aaggtgggt ttcgccatgt cgataccgag
180
cagatttatg gcaatgaagt cgaggtcggg gaagcaattg cgacttccgg cgttcagcgt
240
ggcgacatct ttctgaccac aaaagtctgg gtagataatt ataagcatga tgctttcatc
300
gcactctgtcg atgaaagcct taccaagctt aagaccgact atgtcgatct gctgc
355

<210> 1620
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1620
Xaa Val Pro Lys Pro Val Ser Leu Pro His Lys Ile Lys Gly Thr Ser
1      5      10      15
Met His Asn Val Thr Thr Asn Gly Ala Ser Ile Pro Ala Leu Gly Leu
      20      25      30
Gly Thr Phe Arg Met Pro Gly Glu Asp Val Leu Arg Ile Val Pro Tyr
      35      40      45
Ala Leu Lys Ala Gly Phe Arg His Val Asp Thr Ala Gln Ile Tyr Gly
      50      55      60
Asn Glu Val Glu Val Gly Glu Ala Ile Ala Thr Ser Gly Val Gln Arg
65      70      75      80
Gly Asp Ile Phe Leu Thr Thr Lys Val Trp Val Asp Asn Tyr Lys His
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Asp Ala Phe Ile Ala Ser Val Asp Glu Ser Leu Thr Lys Leu Lys Thr
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Asp Tyr Val Asp Leu Leu
      115

<210> 1621
<211> 386
<212> DNA
<213> Homo sapiens

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<400> 1621

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 120
 cccccgaggc ggcggtaggc agcgcgctgg ccccaggagc cacgggtcaag gcagaaggcg
 180
 ctttgccgct ggagctggcc actgcgcgcg gtatgaggga cggcgcgggc acaaagcccc
 240
 acctgcccac ctacctgctg ctcttcttcc tgctgctgct ctcgggggcg ctcggcggcc
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 386

<210> 1622

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1622

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Val	Arg	Leu	Gly	Ser	Ala	Gly	Pro	Ala	Gly	His	Val	Arg	Arg	His	Ile
		20					25					30			
Gln	Arg	His	Gly	Ala	Gly	Pro	Arg	Gly	Gly	Gly	Arg	Gln	Arg	Ala	Gly
		35				40					45				
Pro	Arg	Ser	His	Gly	Gln	Gly	Arg	Arg	Arg	Phe	Ala	Ala	Gly	Ala	Gly
		50				55				60					
His	Cys	Ala	Arg	Tyr	Glu	Gly	Arg	Arg	Gly	His	Lys	Ala	Arg	Pro	Ala
65				70					75					80	
His	Leu	Pro	Ala	Ala	Leu	Leu	Pro	Ala	Ala	Ala	Leu	Gly	Gly	Ala	Arg
		85					90					95			
Arg	Pro	Leu	His	Arg	Leu	Pro	Ala	Ala	Pro	Phe	Gly	Leu	Arg	Arg	Ala
		100					105					110			
Ala	Pro	Arg	Pro	Leu	Arg	Ser	Arg	Arg	Pro	Arg	Ala	Arg	Lys		
		115					120					125			

<210> 1623

<211> 314

<212> DNA

<213> Homo sapiens

<400> 1623

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 120
 aacttttccg cagtttcaga ggagagtctg caagtgagag ctgcagtgac tgtgccttgt
 180
 gcttggcacc caagcagggc atgggagtct taagtggaac cagggcctca aggacaacag
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 314

<210> 1624
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1624
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 1 5 10 15
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 20 25 30
 Leu Lys Thr Pro Met Pro Cys Leu Gly Ala Lys His Lys Ala Gln Ser
 35 40 45
 Leu Gln Leu Ser Leu Ala Asp Ser Pro Leu Lys Leu Arg Lys Ser Ser
 50 55 60
 Gly Lys Gly Pro Gly Asn Pro Arg Pro Lys Ala Pro Arg Lys Thr Thr
 65 70 75 80
 Ser Lys Gly Pro Lys Cys Leu Thr Arg Lys Gly Pro Gly Ala Gly Pro
 85 90 95
 Arg Arg Gly Ser Gly His Gln
 100

<210> 1625
 <211> 619
 <212> DNA
 <213> Homo sapiens

<400> 1625
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 120
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 180
 ctgggagcac ctgggaagaa gccgggcat gcagggagcc caacctcacc ctgcattcag
 240
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 360
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 420
 ggggcacagt gagttggagc aggggattgg agggtttgtg ggacagcctt ccagggcacc
 480
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 619

<210> 1626
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 1626
 Met Asp Gly Val Cys Val Asn Arg Lys Gly Trp Glu Arg Gly Pro Arg
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 Ala Ala Gly Leu Asn Asn Ser Ala Pro Glu Val Pro Trp Lys Ala Val
 20 25 30
 Pro Gln Thr Leu Gln Ser Pro Ala Pro Thr His Cys Ala Pro Asp Ser
 35 40 45
 Pro Val Phe Pro Asp Tyr Ile Trp Ser Arg Gly Trp Val Glu Lys Leu
 50 55 60
 Lys Glu Ser Arg Ser Val Phe Ser His Gly Leu Lys Ile Pro Ile Phe
 65 70 75 80
 Phe Pro Glu Ala Arg Arg Lys Val Gly Gly Phe Pro Gly Val Leu Gly
 85 90 95
 Leu Arg Ser Gly His Ser Lys Ala Arg Phe
 100 105

<210> 1627
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 1627
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 120
 cacgaagtct atcgggatcc gctgacagac tccggtaaag ttcccgccat ggcagaacct
 180
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 240
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 300
 ctccacattg gccacgcgaa ggccatcgtc accgatttcg gcgttgccga ggatttcggc
 360
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 481

<210> 1628
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 1628
 Met Ala Glu Pro Thr Gly Asn Pro Ala Glu Ser Ser Ser Asp Phe Ile

1	5	10	15
His Gln Val Val Arg Ala Asp Ile Gln Gln Asp Thr Tyr Gly Gly Arg			
	20	25	30
Val Gln Thr Arg Phe Pro Pro Glu Pro Asn Gly Tyr Leu His Ile Gly			
	35	40	45
His Ala Lys Ala Ile Val Thr Asp Phe Gly Val Ala Glu Asp Phe Gly			
	50	55	60
Gly Thr Cys Asn Leu Arg Leu Asp Asp Thr Asn Pro Gly Thr Glu Glu			
65	70	75	80
Thr Glu Tyr Val Glu Ser Ile Val Ala Asp Ile Glu Trp Leu Gly Tyr			
	85	90	95
Ser Pro Ala His Val Val His Ala			
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<210> 1629

<211> 4519

<212> DNA

<213> Homo sapiens

<400> 1629

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120
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180
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240
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360
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1020

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<210> 1630

<211> 496

<212> PRT

<213> Homo sapiens

<400> 1630

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Lys	Ala	Gln	Lys	Arg	Lys	Met	Glu	Glu	Ser	Asp	Glu	Glu	Ala	Val	Gln
			20					25					30		
Ala	Lys	Val	Leu	Arg	Pro	Leu	Arg	Ser	Cys	Asp	Glu	Pro	Leu	Thr	Pro
		35					40					45			
Pro	Pro	His	Ser	Pro	Thr	Ser	Met	Leu	Gln	Leu	Ile	His	Asp	Pro	Val
	50					55					60				
Ser	Pro	Arg	Gly	Met	Val	Thr	Arg	Ser	Ser	Pro	Gly	Ala	Gly	Pro	Ser
65					70					75				80	
Asp	His	His	Ser	Ala	Ser	Arg	Asp	Glu	Arg	Phe	Lys	Arg	Arg	Gln	Leu
				85					90					95	
Leu	Arg	Leu	Gln	Ala	Thr	Glu	Arg	Thr	Met	Val	Arg	Glu	Lys	Glu	Asn
			100					105					110		
Asn	Pro	Ser	Gly	Lys	Lys	Glu	Leu	Ser	Glu	Val	Glu	Lys	Ala	Lys	Ile
	115						120					125			
Arg	Gly	Ser	Tyr	Leu	Thr	Val	Thr	Leu	Gln	Arg	Pro	Thr	Lys	Glu	Leu
	130					135					140				
His	Gly	Thr	Ser	Ile	Val	Pro	Lys	Leu	Gln	Ala	Ile	Thr	Ala	Ser	Ser
145					150					155					160
Ala	Asn	Leu	Arg	His	Ser	Pro	Arg	Val	Leu	Val	Gln	His	Cys	Pro	Ala
				165					170					175	
Arg	Thr	Pro	Gln	Arg	Gly	Asp	Glu	Glu	Gly	Leu	Gly	Gly	Glu	Glu	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Asp	Ser	Ala	Glu	Glu	Gly	Gly
		195					200				205				
Ala	Ala	Arg	Leu	Asn	Gly	Arg	Gly	Ser	Trp	Ala	Gln	Asp	Gly	Asp	Glu
	210					215					220				
Ser	Trp	Met	Gln	Arg	Glu	Val	Trp	Met	Ser	Val	Phe	Arg	Tyr	Leu	Ser
225					230					235				240	
Arg	Arg	Glu	Leu	Cys	Glu	Cys	Met	Arg	Val	Cys	Lys	Thr	Trp	Tyr	Lys
			245					250						255	
Trp	Cys	Cys	Asp	Lys	Arg	Leu	Trp	Thr	Lys	Ile	Asp	Leu	Ser	Arg	Cys
			260					265					270		
Lys	Ala	Ile	Val	Pro	Gln	Ala	Leu	Ser	Gly	Ile	Ile	Lys	Arg	Gln	Pro
		275					280					285			
Val	Ser	Leu	Asp	Leu	Ser	Trp	Thr	Asn	Ile	Ser	Lys	Lys	Gln	Leu	Thr

290		295		300											
Trp	Leu	Val	Asn	Arg	Leu	Pro	Gly	Leu	Lys	Asp	Leu	Leu	Leu	Ala	Gly
305			310					315							320
Cys	Ser	Trp	Ser	Ala	Val	Ser	Ala	Leu	Ser	Thr	Ser	Ser	Cys	Pro	Leu
			325					330							335
Leu	Arg	Thr	Leu	Asp	Leu	Arg	Trp	Ala	Val	Gly	Ile	Lys	Asp	Pro	Gln
			340					345							350
Ile	Arg	Asp	Leu	Leu	Thr	Pro	Pro	Ala	Asp	Lys	Pro	Gly	Gln	Asp	Asn
		355					360					365			
Arg	Ser	Lys	Leu	Arg	Asn	Met	Thr	Asp	Phe	Arg	Leu	Ala	Gly	Leu	Asp
		370				375						380			
Ile	Thr	Asp	Ala	Thr	Leu	Arg	Leu	Ile	Ile	Arg	His	Met	Pro	Leu	Leu
385					390					395					400
Ser	Arg	Leu	Asp	Leu	Ser	His	Cys	Ser	His	Leu	Thr	Asp	Gln	Ser	Ser
			405						410						415
Asn	Leu	Leu	Thr	Ala	Val	Gly	Ser	Ser	Thr	Arg	Tyr	Ser	Leu	Thr	Glu
			420					425					430		
Leu	Asn	Met	Ala	Gly	Cys	Asn	Lys	Leu	Thr	Asp	Gln	Thr	Leu	Ile	Tyr
		435					440					445			
Leu	Arg	Arg	Ile	Ala	Asn	Val	Thr	Leu	Ile	Asp	Leu	Arg	Gly	Cys	Lys
		450				455					460				
Gln	Ile	Thr	Arg	Lys	Ala	Cys	Glu	His	Phe	Ile	Ser	Asp	Leu	Ser	Ile
465				470						475					480
Asn	Ser	Leu	Tyr	Cys	Leu	Ser	Asp	Glu	Lys	Leu	Ile	Gln	Lys	Ile	Ser
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<210> 1631

<211> 330

<212> DNA

<213> Homo sapiens

<400> 1631

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120
ccatgttgac tctcgcgacg agcttggtga gttgcttggc ttttcgaaag acgacattac
180
caaccaagtt cagcaagctg tgggcgcctt ggggtttaccg ccactagaag atgaaaacgc
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acaaggtgaa gatccggcgt cgcagggtccc gccagtcacc gacgaggacc ccactgcttt
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330

<210> 1632

<211> 92

<212> PRT

<213> Homo sapiens

<400> 1632

Met	Gln	Cys	Gln	Asn	Pro	Asn	Thr	Arg	Ala	Ser	Asp	Met	Ala	Gly	Trp
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Lys	Thr	Leu	Gln	Thr	Leu	Phe	His	Val	Asp	Ser	Arg	Asp	Glu	Leu	Val

			20					25					30			
Glu	Leu	Leu	Gly	Phe	Ser	Lys	Asp	Asp	Ile	Thr	Asn	Gln	Val	Gln	Gln	
		35					40					45				
Ala	Val	Gly	Ala	Leu	Gly	Leu	Pro	Pro	Leu	Glu	Asp	Glu	Asn	Ala	Gln	
	50					55					60					
Gly	Glu	Asp	Pro	Ala	Ser	Gln	Val	Pro	Pro	Val	Thr	Asp	Glu	Asp	Pro	
65					70					75					80	
Thr	Ala	Phe	Phe	Asp	Gln	Val	Pro	Asp	Val	Pro	Leu					
			85					90								

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<210> 1633
<211> 259
<212> DNA
<213> Homo sapiens
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120
ggattgttag gtggatttac gacttattcc gccctcacgg tggaaaccgg ccaacgtgtg
180
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259
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<210> 1634
<211> 86
<212> PRT
<213> Homo sapiens
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<400> 1634
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Leu Leu Glu Leu Leu Val His Ala Gly Pro Gly Pro Gly Val Arg Arg
          20           25           30
Ala Val Arg Leu Cys Ile Gly Thr Gly Leu Leu Gly Gly Phe Thr Thr
          35           40           45
Tyr Ser Ala Leu Thr Val Glu Thr Gly Gln Arg Val Met Ser Gly Gln
          50           55           60
Trp Leu Trp Gly Ile Ala Tyr Leu Leu Thr Ser Val Val Ala Gly Ala
65           70           75           80
Leu Leu Ala Trp Val Met
          85

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<210> 1635
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<212> DNA
<213> Homo sapiens
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<400> 1635
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120
cgtcgcgagc tgcgcgagtt cctggacaag tgcgcaggaa gcaaggcaat agtttgggat
180
gaatacctaa ctggaccctt tggcctgatt gcacagtatt cactattgaa ggaacatgaa
240
gtggaaaaaa tggtcacact taaaggaaat cgtttgccgg cagctgatgt gaagaatata
300
atTTTTTTTg tcagaccag gctagagttg atggatataa tcgctgaaaa cgtgctcagt
360
gaagatagac gaggcccaac gagagatttt catattctgt ttgtgccacg cgtagcctg
420
ttgtgcgaac agcgggtgaa ggatctgggt gtcttgggat cctttattca caggaggag
480
tacagcttag atctcattcc attcgatggg gatctcttat ccatggaatc agagggtgca
540
ttcaaagagt gctacctgga ggggtgaccag acgagcctgt accacgcagc caaggggctg
600
atgaccctgc aagctctgta tggaacgac cccagatct ttgggaaagg agaatgcgct
660
cgggtgagaa ccggctgctt tgtgggtgta aaggagggcc cttcacacc caaaaggag
720
gaggaacggg aagctcctta caaacaatt cagttgatct taattattta tgaatactgt
780
actcatgaat tc
792

<210> 1636

<211> 243

<212> PRT

<213> Homo sapiens

<400> 1636

Met	Ala	Ala	His	Leu	Ser	Tyr	Gly	Arg	Val	Asn	Leu	Asn	Val	Leu	Arg
1				5					10					15	
Glu	Ala	Val	Arg	Arg	Glu	Leu	Arg	Glu	Phe	Leu	Asp	Lys	Cys	Ala	Gly
			20					25					30		
Ser	Lys	Ala	Ile	Val	Trp	Asp	Glu	Tyr	Leu	Thr	Gly	Pro	Phe	Gly	Leu
		35					40					45			
Ile	Ala	Gln	Tyr	Ser	Leu	Leu	Lys	Glu	His	Glu	Val	Glu	Lys	Met	Phe
		50				55					60				
Thr	Leu	Lys	Gly	Asn	Arg	Leu	Pro	Ala	Ala	Asp	Val	Lys	Asn	Ile	Ile
65					70					75				80	
Phe	Phe	Val	Arg	Pro	Arg	Leu	Glu	Leu	Met	Asp	Ile	Ile	Ala	Glu	Asn
			85						90					95	
Val	Leu	Ser	Glu	Asp	Arg	Arg	Gly	Pro	Thr	Arg	Asp	Phe	His	Ile	Leu
			100					105					110		
Phe	Val	Pro	Arg	Arg	Ser	Leu	Leu	Cys	Glu	Gln	Arg	Leu	Lys	Asp	Leu
		115					120						125		
Gly	Val	Leu	Gly	Ser	Phe	Ile	His	Arg	Glu	Glu	Tyr	Ser	Leu	Asp	Leu
		130				135					140				
Ile	Pro	Phe	Asp	Gly	Asp	Leu	Leu	Ser	Met	Glu	Ser	Glu	Gly	Ala	Phe
145					150					155				160	
Lys	Glu	Cys	Tyr	Leu	Glu	Gly	Asp	Gln	Thr	Ser	Leu	Tyr	His	Ala	Ala

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<210> 1637
<211> 357
<212> DNA
<213> Homo sapiens
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<210> 1638
<211> 119
<212> PRT
<213> Homo sapiens
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1313

<210> 1639
 <211> 396
 <212> DNA
 <213> Homo sapiens

<400> 1639
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 aaagttatcg ttatgggaca taagcgacca gatttagatg ctataggtgc agctatcgga
 120
 gtttcgcgct ttgcatcaat gaataattta gaggcattta tcgttcttaa tgattctgat
 180
 attgatccga cattacgtcg tgttatggat gagattgata agaaaccgga actaaaagaa
 240
 cgctttgtaa catcggatga ggcttgggat atgatgactt ctaagacgac tgctgttggt
 300
 gtagatacac ataaacctga aatggtctta gatgaaaatg tcttaaataa agcaaaccgc
 360
 aaagtagtca ttgatcatca tagacgtggc gaaact
 396

<210> 1640
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 1640
 Thr Arg Val Arg Ala Arg Val Ile Ser His Ala Leu Lys Asp Ile Leu
 1 5 10 15
 Thr Glu Gly Asp Lys Val Ile Val Met Gly His Lys Arg Pro Asp Leu
 20 25 30
 Asp Ala Ile Gly Ala Ala Ile Gly Val Ser Arg Phe Ala Ser Met Asn
 35 40 45
 Asn Leu Glu Ala Phe Ile Val Leu Asn Asp Ser Asp Ile Asp Pro Thr
 50 55 60
 Leu Arg Arg Val Met Asp Glu Ile Asp Lys Lys Pro Glu Leu Lys Glu
 65 70 75 80
 Arg Phe Val Thr Ser Asp Glu Ala Trp Asp Met Met Thr Ser Lys Thr
 85 90 95
 Thr Val Val Val Val Asp Thr His Lys Pro Glu Met Val Leu Asp Glu
 100 105 110
 Asn Val Leu Asn Lys Ala Asn Arg Lys Val Val Ile Asp His His Arg
 115 120 125
 Arg Gly Glu Thr
 130

<210> 1641
 <211> 376
 <212> DNA
 <213> Homo sapiens

<400> 1641
 ttatcagcaa acgacagcag acaagagctc ctggggctct ggggaaatgc tgctgcctgc
 60

tggccaaacg aactgatgga tgggctcttg gagtgggaga gactgggcag aagctgtgtg
 120
 ggggtgggtga ctcccaacct aaagaaccca ctgagacata tgtggcttcc ctcttcacc
 180
 ttcattgcct ctttccgtct agatgctggc aaggggggac ttggtggaca aagagagcta
 240
 ctattcattc aggagctatg ttacaccagt cactttacat gtgccacttg ctctgggtta
 300
 aactgtgcct cccctcactc atatgttgaa gtcctaacct taactacctc agaatgggac
 360
 gttatttgga aaaaag
 376

<210> 1642

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1642

Met	Asp	Gly	Leu	Leu	Glu	Trp	Glu	Arg	Leu	Gly	Arg	Ser	Cys	Val	Gly
1				5					10					15	
Trp	Val	Thr	Pro	Asn	Leu	Lys	Asn	Pro	Leu	Arg	His	Met	Trp	Leu	Pro
			20					25					30		
Ser	Ser	Thr	Phe	Ile	Ala	Ser	Phe	Arg	Leu	Asp	Ala	Gly	Lys	Gly	Gly
		35					40					45			
Leu	Gly	Gly	Gln	Arg	Glu	Leu	Phe	Ile	Gln	Glu	Leu	Cys	Tyr	Thr	
	50					55				60					
Ser	His	Phe	Thr	Cys	Ala	Thr	Cys	Ser	Gly	Leu	Asn	Cys	Ala	Ser	Pro
65				70					75					80	
His	Ser	Tyr	Val	Glu	Val	Leu	Thr	Leu	Thr	Thr	Ser	Glu	Trp	Asp	Val
				85				90						95	
Ile	Trp	Lys	Lys												
			100												

<210> 1643

<211> 494

<212> DNA

<213> Homo sapiens

<400> 1643

aagcttccag aattccatag gaaccagct gcccttcttg tacctcagtg aggtggagcc
 60
 gagtgtctga gaggcaggtgc aggagaaggt gtgggctcca cctgggcctc tgaagccagg
 120
 ggccagaatc ccagatcta ggtccaagag ggggctccat gacctcccca tgctgctcct
 180
 ctgcttggat ccaggatata agaaaggagg ggcacacact gtgggggaac tctgggggtcc
 240
 cctgtgtgca tcagcgagtc ccgggtctgc cccaccagga tgcaaagggc ctggctgctc
 300
 cagcccatg ctcacagccc tataagtgca cgatggcacc ctatatcatc taagcggggc
 360
 tgtgcctcct gaggttttag ggacaccaga atgagcccc ctcggcggag tctggctctg
 420

ggtgtgtgga gatgccacct gggacgggaa cccaggtgc atggagcccc actgcagaca
 480
 ccatcccccgtgtg
 494

<210> 1644
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 1644
 Met Gly Leu Glu Gln Pro Gly Pro Leu His Pro Gly Gly Ala Asp Pro
 1 5 10 15
 Gly Leu Ala Asp Ala His Arg Gly Pro Gln Ser Ser Pro Thr Val Cys
 20 25 30
 Ala Pro Pro Phe Leu Tyr Pro Gly Ser Lys Gln Arg Ser Ser Met Gly
 35 40 45
 Arg Ser Trp Ser Pro Leu Leu Asp Leu Asp Leu Gly Ile Leu Ala Pro
 50 55 60
 Gly Phe Arg Gly Pro Gly Gly Ala His Thr Phe Ser Cys Thr Cys Ser
 65 70 75 80
 Gln Thr Leu Gly Ser Thr Ser Leu Arg Tyr Gln Lys Gly Ser Trp Val
 85 90 95
 Pro Met Glu Phe Trp Lys Leu
 100

<210> 1645
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 1645
 nnagatctgt cggataatgg ctttggctcc gacatggtga cactggtgct tgccatcggg
 60
 aggagccggt ctctgaaaca cgtggccctt ggaaggaact tcaacgttcg gtgcaaggag
 120
 accctggacg atgtcctgca tcggatagcc cagctaatagc aggatgacga ctgtcctttg
 180
 cagtcactat ccgtggctga gtcgcggttg aagcaggggtg ccagcaccct gatccgggct
 240
 ttgggcacca atcctaaaact gacagcgctg gatatcagtg gcaatgccat aggggatgct
 300
 ggggccaaga tgctagccaa ggctctacgc
 330

<210> 1646
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1646
 Xaa Asp Leu Ser Asp Asn Gly Phe Gly Ser Asp Met Val Thr Leu Val
 1 5 10 15
 Leu Ala Ile Gly Arg Ser Arg Ser Leu Lys His Val Ala Leu Gly Arg

	20		25		30										
Asn	Phe	Asn	Val	Arg	Cys	Lys	Glu	Thr	Leu	Asp	Asp	Val	Leu	His	Arg
	35						40					45			
Ile	Ala	Gln	Leu	Met	Gln	Asp	Asp	Asp	Cys	Pro	Leu	Gln	Ser	Leu	Ser
	50					55					60				
Val	Ala	Glu	Ser	Arg	Leu	Lys	Gln	Gly	Ala	Ser	Ile	Leu	Ile	Arg	Ala
65					70					75				80	
Leu	Gly	Thr	Asn	Pro	Lys	Leu	Thr	Ala	Leu	Asp	Ile	Ser	Gly	Asn	Ala
			85						90				95		
Ile	Gly	Asp	Ala	Gly	Ala	Lys	Met	Leu	Ala	Lys	Ala	Leu	Arg		
	100							105					110		

<210> 1647

<211> 501

<212> DNA

<213> Homo sapiens

<400> 1647

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aggccgctcg gtgatccgcg gcggcggcag cggcgcttcc tgctaggacc ggccggggcc
60
gtaccggagg ctcgggctcc accgaccctc ctcccacccc ctcccactca ccctctgggc
120
cgcgactgcg cagggcgggg ccggccgaac catgggccgc ggtgtgggct aagctgggtg
180
ccccggcttt agactggacc ccacaatgtt tgcagagatg ttcaggcacg cgggagctga
240
ttacacacaa tgaatggggg caatgagagc agtggagcag acagagctgg gggccctgtg
300
gccacatctg tccccatcgg ctggcagcgc tgtgtgagag aggggtgctgt gctctacatc
360
agtccaagtg gcacagagct gtcttccttg gagcaaaccg ggagctacct cctcagcgat
420
gggacctgca agtgcggtct ggagtggtcca cttaatgtcc ccaaggtttt caactttgac
480
cctttggccc cggtgacccc g
501

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<210> 1648

<211> 84

<212> PRT

<213> Homo sapiens

<400> 1648

Met	Asn	Gly	Gly	Asn	Glu	Ser	Ser	Gly	Ala	Asp	Arg	Ala	Gly	Gly	Pro
1				5				10					15		
Val	Ala	Thr	Ser	Val	Pro	Ile	Gly	Trp	Gln	Arg	Cys	Val	Arg	Glu	Gly
		20					25					30			
Ala	Val	Leu	Tyr	Ile	Ser	Pro	Ser	Gly	Thr	Glu	Leu	Ser	Ser	Leu	Glu
	35					40					45				
Gln	Thr	Arg	Ser	Tyr	Leu	Leu	Ser	Asp	Gly	Thr	Cys	Lys	Cys	Gly	Leu
	50				55					60					
Glu	Cys	Pro	Leu	Asn	Val	Pro	Lys	Val	Phe	Asn	Phe	Asp	Pro	Leu	Ala
65				70					75					80	
Pro	Val	Thr	Pro												

<210> 1649
 <211> 441
 <212> DNA
 <213> Homo sapiens

<400> 1649
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 60
 accaactcac ggttgctcgc catcttctcc aacaagggtga tccggcgcta tccggccttt
 120
 gaagacttcc acgggatgga agaatgcac gatcagatcg tttcgtattt ccgccacgcc
 180
 gcccgaaggcc tggaagagaa gaaacagatc ctttacctgc tcggccccgt cggcggcggt
 240
 aaatcgcccc tggccgaaaa gctgaaacag ctgatcgaga aggtccccct ctacgccatc
 300
 aagggctcgc cgggtcttca gtcgccccctg ggggtgttca acgccactga agacggcgcg
 360
 atcctcgagg aagacttcgg gattccacgg cgttacctga acaccatcat gtcgccccgt
 420
 gcgaccaagc gcctggccga a
 441

<210> 1650
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1650
 Ala Ser Ala Ala Glu Arg Val Leu Leu Ala Ile Gly Glu Pro Glu Leu
 1 5 10 15
 Leu Asp Thr Ser Thr Asn Ser Arg Leu Ser Arg Ile Phe Ser Asn Lys
 20 25 30
 Val Ile Arg Arg Tyr Pro Ala Phe Glu Asp Phe His Gly Met Glu Glu
 35 40 45
 Cys Ile Asp Gln Ile Val Ser Tyr Phe Arg His Ala Ala Gln Gly Leu
 50 55 60
 Glu Glu Lys Lys Gln Ile Leu Tyr Leu Leu Gly Pro Val Gly Gly Gly
 65 70 75 80
 Lys Ser Ser Leu Ala Glu Lys Leu Lys Gln Leu Ile Glu Lys Val Pro
 85 90 95
 Phe Tyr Ala Ile Lys Gly Ser Pro Val Phe Glu Ser Pro Leu Gly Leu
 100 105 110
 Phe Asn Ala Thr Glu Asp Gly Ala Ile Leu Glu Glu Asp Phe Gly Ile
 115 120 125
 Pro Arg Arg Tyr Leu Asn Thr Ile Met Ser Pro Trp Ala Thr Lys Arg
 130 135 140
 Leu Ala Glu
 145

<210> 1651
 <211> 408

<212> DNA

<213> Homo sapiens

<400> 1651

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nccgcggatc cctccggcat cctgggttatc gtcacctcga aggaatccgg agccccgactg
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cgccgcgagc tttccgaacg cctcgaggat tacgccgcac aaacttccat ggtgcgttcc
120
gtacactccc tcgcattcgc gttgctgcgc acagcggccg aggaggagct gcgccttatt
180
accggtgcgg acnaagacgc cgttatccgc gagctgctca cgggccaagc agaagacgga
240
catggctcgt ggcccgcgga gatgcgcccc gcgtggaatn natgtgggct ttgcggcgag
300
ctgcgcgatt tcctttttgcg ttccattgaa cgcggcctgg gaccgggtga cctagagagc
360
ctcggtgccg agcacggccg ccccatgtgg tctgcggcgg gtgaattc
408

```

<210> 1652

<211> 136

<212> PRT

<213> Homo sapiens

<400> 1652

```

Xaa Ala Asp Pro Ser Gly Ile Leu Val Ile Ala Pro Ser Lys Glu Ser
 1           5           10           15
Gly Ala Arg Leu Arg Arg Glu Leu Ser Glu Arg Leu Glu Asp Tyr Ala
          20           25           30
Ala Gln Thr Ser Met Val Arg Ser Val His Ser Leu Ala Phe Ala Leu
          35           40           45
Leu Arg Thr Ala Ala Glu Glu Glu Leu Arg Leu Ile Thr Gly Ala Asp
          50           55           60
Xaa Asp Ala Val Ile Arg Glu Leu Leu Thr Gly Gln Ala Glu Asp Gly
65           70           75           80
His Gly Ser Trp Pro Ala Glu Met Arg Pro Ala Trp Asn Xaa Cys Gly
          85           90           95
Leu Ser Arg Gln Leu Arg Asp Phe Leu Leu Arg Ser Ile Glu Arg Gly
          100          105          110
Leu Gly Pro Gly Asp Leu Glu Ser Leu Gly Ala Glu His Gly Arg Pro
          115          120          125
Met Trp Ser Ala Ala Gly Glu Phe
          130          135

```

<210> 1653

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1653

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ccagcctctc tcgcaccgcg tcctttcttcc ggccatacgg cacccaatgt cgcgtcacca
60
tcacccgcgc acatggccat cgctccaccg gacgagttga gtgacaagat ccggtgcatt
120

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ctgcgcaccc ttgaacctgg tgacagtgtg aaggagattc tcaacacgtc gcgtgtcgtc
 180
 ggcattgacg tccagagcag cctgcttatt gctgggtgctc agcatctgta cttgttggac
 240
 gattacttcc agcgtccgaa cggtgaaatc gtcaatgtct gggaagctcc gccacacgag
 300
 cgcgatgcct tgatcgtggc ggccggtgtc gcacagggtg cacaaagcag cacacccgtg
 360
 cagatatggc gctgggaaca gctccgactt tgtctaga
 398

<210> 1654

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1654

Pro	Ala	Ser	Leu	Arg	Pro	Arg	Pro	Ser	Ser	Gly	His	Thr	Ala	Pro	Asn
1				5				10						15	
Val	Ala	Ser	Pro	Ser	Pro	Ala	His	Met	Ala	Ile	Ala	Pro	Pro	Asp	Glu
			20					25					30		
Leu	Ser	Asp	Lys	Ile	Arg	Cys	Ile	Leu	Arg	Thr	Leu	Glu	Pro	Gly	Asp
		35				40					45				
Ser	Val	Lys	Glu	Ile	Leu	Asn	Thr	Ser	Arg	Val	Val	Gly	Ile	Asp	Val
	50					55					60				
Gln	Ser	Ser	Leu	Leu	Ile	Ala	Gly	Ala	Gln	His	Leu	Tyr	Leu	Leu	Asp
65					70				75					80	
Asp	Tyr	Phe	Gln	Arg	Pro	Asn	Gly	Glu	Ile	Val	Asn	Val	Trp	Glu	Ala
			85					90					95		
Pro	Pro	His	Glu	Arg	Asp	Ala	Leu	Ile	Val	Ala	Ala	Gly	Val	Ala	Gln
		100						105				110			
Val	Ala	Gln	Ser	Ser	Thr	Pro	Val	Gln	Ile	Trp	Arg	Trp	Glu	Gln	Leu
		115					120					125			
Arg	Leu	Cys	Leu												
			130												

<210> 1655

<211> 1115

<212> DNA

<213> Homo sapiens

<400> 1655

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 120
 ggagttcttg ataagctttt cggaagcgcg ctctgcagg ctggtcgcta cctggtgtcc
 180
 cacaaggcgt ggatgaagac ggtgcctaca gagaactgcg acgtgctgat gaccttccca
 240
 gacacgaccg atgaccacac gctgctatgg ctgctgaacc acatcccggt gggcattccc
 300
 gagctcatcg tgcaagtcg ccaccaccgc cacacgcgtg cctacgcctt ctttgcacc
 360

gccacgtatg agagcctact ccgagggggcc gacgagctgg gtctgcgcaa agcagtgaag
 420
 gccgagtttg gcggggggcac ccgcggcttc tctgcgagg aggactttat ctatgagaat
 480
 gtggagagcg agctacgctt cttcacctcc caggaacgcc agagcatcat ccgcttctgg
 540
 ctgcagaatt tgcgtgccaa gcagggagaa gcactccaca acgtgcgctt cctggaggac
 600
 cagccaatca tcccggagct ggcagcacgt gggatcatcc agcaggtgtt cctgtccac
 660
 gagcagcgta ttctgaaccg cctcatgaag tcatgggtgc aggccgtgtg tgaaaaccag
 720
 cctctagatg acatctgtga ttactttggt gtgaaaattg ccatgtactt cgctggctg
 780
 ggctttctaca cgtcggctat ggtataccca gctgtcttcg ggtctgtcct gtacacattc
 840
 acagaggctg atcagacaag ccgggatgtt tctgcggtgg tctttgccct cttcaacgtg
 900
 atctggtcga cgctgttcct ataggaatgg aagcgtatag gggctgagct gggatataat
 960
 tgggggacgc tggactcatc ctgggaagcc gtggaggagc cacgccccca gttcaggtgc
 1020
 gtgcgacgta tcatcccat cactcggggc gaggagtctt actaccgcc ctggaagcgg
 1080
 ctgctcttcc agctgcttgt tagcctccgc ctgtg
 1115

<210> 1656

<211> 299

<212> PRT

<213> Homo sapiens

<400> 1656

Met	Ala	Glu	Ala	Ala	Ser	Gly	Ala	Gly	Gly	Thr	Ser	Leu	Glu	Gly	Glu
1				5					10					15	
Arg	Gly	Lys	Arg	Pro	Pro	Pro	Glu	Gly	Glu	Pro	Ala	Ala	Pro	Ala	Ser
			20					25					30		
Gly	Val	Leu	Asp	Lys	Leu	Phe	Gly	Lys	Arg	Leu	Leu	Gln	Ala	Gly	Arg
		35					40					45			
Tyr	Leu	Val	Ser	His	Lys	Ala	Trp	Met	Lys	Thr	Val	Pro	Thr	Glu	Asn
		50				55					60				
Cys	Asp	Val	Leu	Met	Thr	Phe	Pro	Asp	Thr	Thr	Asp	Asp	His	Thr	Leu
65					70					75				80	
Leu	Trp	Leu	Leu	Asn	His	Ile	Arg	Val	Gly	Ile	Pro	Glu	Leu	Ile	Val
				85					90					95	
Gln	Val	Arg	His	His	Arg	His	Thr	Arg	Ala	Tyr	Ala	Phe	Phe	Val	Thr
			100					105					110		
Ala	Thr	Tyr	Glu	Ser	Leu	Leu	Arg	Gly	Ala	Asp	Glu	Leu	Gly	Leu	Arg
		115					120					125			
Lys	Ala	Val	Lys	Ala	Glu	Phe	Gly	Gly	Gly	Thr	Arg	Gly	Phe	Ser	Cys
		130				135					140				
Glu	Glu	Asp	Phe	Ile	Tyr	Glu	Asn	Val	Glu	Ser	Glu	Leu	Arg	Phe	Phe
145				150						155					160
Thr	Ser	Gln	Glu	Arg	Gln	Ser	Ile	Ile	Arg	Phe	Trp	Leu	Gln	Asn	Leu

```

          165          170          175
Arg Ala Lys Gln Gly Glu Ala Leu His Asn Val Arg Phe Leu Glu Asp
          180          185          190
Gln Pro Ile Ile Pro Glu Leu Ala Ala Arg Gly Ile Ile Gln Gln Val
          195          200          205
Phe Pro Val His Glu Gln Arg Ile Leu Asn Arg Leu Met Lys Ser Trp
          210          215          220
Val Gln Ala Val Cys Glu Asn Gln Pro Leu Asp Asp Ile Cys Asp Tyr
225          230          235          240
Phe Gly Val Lys Ile Ala Met Tyr Phe Ala Trp Leu Gly Phe Tyr Thr
          245          250          255
Ser Ala Met Val Tyr Pro Ala Val Phe Gly Ser Val Leu Tyr Thr Phe
          260          265          270
Thr Glu Ala Asp Gln Thr Ser Arg Asp Val Ser Cys Val Val Phe Ala
          275          280          285
Leu Phe Asn Val Ile Trp Ser Thr Leu Phe Leu
          290          295

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<210> 1657

<211> 333

<212> DNA

<213> Homo sapiens

<400> 1657

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tgttagaggct cgaggtcatc cggaccatgt ggtccaggac gcccccgctcc tccggggcccc
60
gcacggagac gcggcgctcag cacggacagc acgcagtctg tgagcctctg caggcagttc
120
ttggagcccc cgggcttccc gcgccgcttc agggggcggg cggcagctcg ggccggtact
180
tctcccaaaa ctgctccggg caggggcgct ccagcagcct ctgcatgaga cggacggcat
240
ccacgcggcc cgtgtaagtg gccactcct gcggcgacat tccacggcgg gggtaccctc
300
gcgtggacat ccgcccctgc tagcatcagg gct
333

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<210> 1658

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1658

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Met Leu Ala Gly Ala Asp Val His Ala Arg Val Pro Pro Pro Trp Asn
 1          5          10          15
Val Ala Ala Gly Val Gly His Leu His Gly Pro Arg Gly Cys Arg Pro
          20          25          30
Ser His Ala Glu Ala Ala Gly Ala Pro Leu Pro Gly Ala Val Leu Gly
          35          40          45
Glu Val Pro Ala Arg Ala Ala Arg Pro Leu Lys Arg Arg Gly Lys
          50          55          60
Pro Ala Gly Ser Lys Asn Cys Leu Gln Arg Leu Thr Asp Cys Val Leu
65          70          75          80
Ser Val Leu Thr Pro Arg Leu Arg Ala Gly Pro Gly Gly Arg Gly Arg

```


85 90 95
 Pro Gly Pro His Gly Pro Asp Asp Leu Glu Pro Leu
 100 105

<210> 1659
 <211> 382
 <212> DNA
 <213> Homo sapiens

<400> 1659
 nnaagcttat ttgttattac taatattttc cgtgaccaga tgggccgcta tgggtgagatt
 60
 tacacaactt acaagatgat tttggatgct attcgtaagg tgcctactgc cactgttctc
 120
 cttaatggag acagtccact tttctacaag ccagctattc caaatcctgt acagtatttt
 180
 ggttttgact tggagaaaagg cccagcccaa ctggctcact ataataaccga aggaattctc
 240
 tgtcccgact gccaaaggcat cctcaaatat gagcataata cctatgcaaa cttgggcgcc
 300
 tatatctgtg aagactgtgg atgtaaactg cctgatctcg actatcgctt gacagaactg
 360
 gttgagttaa ccaacaatcg cn
 382

<210> 1660
 <211> 127
 <212> PRT
 <213> Homo sapiens

<400> 1660
 Xaa Ser Leu Phe Val Ile Thr Asn Ile Phe Arg Asp Gln Met Gly Arg
 1 5 10 15
 Tyr Gly Glu Ile Tyr Thr Thr Tyr Lys Met Ile Leu Asp Ala Ile Arg
 20 25 30
 Lys Val Pro Thr Ala Thr Val Leu Leu Asn Gly Asp Ser Pro Leu Phe
 35 40 45
 Tyr Lys Pro Ala Ile Pro Asn Pro Val Gln Tyr Phe Gly Phe Asp Leu
 50 55 60
 Glu Lys Gly Pro Ala Gln Leu Ala His Tyr Asn Thr Glu Gly Ile Leu
 65 70 75 80
 Cys Pro Asp Cys Gln Gly Ile Leu Lys Tyr Glu His Asn Thr Tyr Ala
 85 90 95
 Asn Leu Gly Ala Tyr Ile Cys Glu Asp Cys Gly Cys Lys Arg Pro Asp
 100 105 110
 Leu Asp Tyr Arg Leu Thr Glu Leu Val Glu Leu Thr Asn Asn Arg
 115 120 125

<210> 1661
 <211> 524
 <212> DNA
 <213> Homo sapiens

<400> 1661

acgcgtcgat gatcatggag aagacgcggg cgggctcctt gcctgtgacc ttcttgtaca
60
gctgcgggta gtagagctcc aggctctcga ggaaggccac gtagcccttg tggccgggtcc
120
gctgcaggat gtccaggagc acaccactt tccgtttgcg gatgaccagg ttgggggtcgc
180
tgagcacctg ctctcatca tcagggttca ggaccttgca ctgccgcagg taagggtgtga
240
tgcgtagagg gtcgatgacc gaggtgagcg tcaccggaa gccctccagg acgttccagc
300
actcgatc gttctcgtag tccgacatgg cctcagcagg caggctgggg agtgtggggc
360
agtgtgaga gcgatgccg ctctgcccc caccggggc cagctccac tccttctcag
420
acgctggggc agggctctcg tcagggcatc gagggggatc agcccaggcg catccaggag
480
aggtgccag ctccgtgtcc catccacgc ttgatcgtg catg
524

<210> 1662

<211> 174

<212> PRT

<213> Homo sapiens

<400> 1662

Met	Gln	Arg	Ser	Ser	Val	Gly	Trp	Asp	Thr	Glu	Leu	Gly	Thr	Ser	Pro
1				5					10					15	
Gly	Cys	Ala	Trp	Ala	Asp	Pro	Pro	Arg	Cys	Pro	Asp	Glu	Ser	Pro	Gly
			20					25				30			
Pro	Ala	Ser	Glu	Lys	Glu	Trp	Glu	Leu	Gly	Pro	Gly	Gly	Gly	Arg	Ser
			35				40					45			
Arg	His	Arg	Ser	Gln	His	Cys	Pro	Thr	Leu	Pro	Ser	Leu	Pro	Ala	Glu
			50			55					60				
Ala	Met	Ser	Asp	Tyr	Glu	Asn	Asp	Asp	Glu	Cys	Trp	Asn	Val	Leu	Glu
65					70				75					80	
Gly	Phe	Arg	Val	Thr	Leu	Thr	Ser	Val	Ile	Asp	Pro	Ser	Arg	Ile	Thr
			85					90					95		
Pro	Tyr	Leu	Arg	Gln	Cys	Lys	Val	Leu	Asn	Pro	Asp	Asp	Glu	Glu	Gln
			100				105					110			
Val	Leu	Ser	Asp	Pro	Asn	Leu	Val	Ile	Arg	Lys	Arg	Lys	Val	Gly	Val
		115				120					125				
Leu	Leu	Asp	Ile	Leu	Gln	Arg	Thr	Gly	His	Lys	Gly	Tyr	Val	Ala	Phe
		130				135					140				
Leu	Glu	Ser	Leu	Glu	Leu	Tyr	Tyr	Pro	Gln	Leu	Tyr	Lys	Lys	Val	Thr
145					150				155					160	
Gly	Lys	Glu	Pro	Ala	Arg	Val	Phe	Ser	Met	Ile	Ile	Asp	Ala		
			165						170						

<210> 1663

<211> 321

<212> DNA

<213> Homo sapiens

<400> 1663

nnagtacttg tcatgattac gcctagtttg ggtatctatt tctctcagcg ttctcagatc
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 120
 gtcaagaggt ggcacgatcc cgactacgtc cgtgctcagg cgcgctccca gctcggctgg
 180
 gtgatgccgg gcgaaactgg gtatcaggtc attggagaaa acggtaaggt cattggatcg
 240
 acgacttctt tggacgaaaa agatccggcg agtgaagcca gcgctgacgc tcggtggtgg
 300
 caagaggctt gcggatcagt c
 321

<210> 1664

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1664

Xaa	Val	Leu	Val	Met	Ile	Thr	Pro	Ser	Leu	Gly	Ile	Tyr	Phe	Ser	Gln
1				5					10					15	
Arg	Ser	Gln	Ile	Ser	Arg	Thr	Gln	Asp	Asp	Glu	Ala	Arg	Thr	Arg	Ala
		20						25					30		
Ser	Ile	Ser	Thr	Leu	Gln	Asp	Glu	Val	Lys	Arg	Trp	His	Asp	Pro	Asp
		35					40					45			
Tyr	Val	Arg	Ala	Gln	Ala	Arg	Ser	Gln	Leu	Gly	Trp	Val	Met	Pro	Gly
	50					55				60					
Glu	Thr	Gly	Tyr	Gln	Val	Ile	Gly	Glu	Asn	Gly	Lys	Val	Ile	Gly	Ser
65				70				75					80		
Thr	Thr	Ser	Leu	Asp	Glu	Lys	Asp	Pro	Ala	Ser	Glu	Ala	Ser	Ala	Asp
			85					90					95		
Ala	Arg	Trp	Trp	Gln	Glu	Ala	Cys	Gly	Ser	Val					
			100					105							

<210> 1665

<211> 431

<212> DNA

<213> Homo sapiens

<400> 1665

gcttccgaac tcatcaagaa gctcaagagg tataaaatgg ttttgcgctc taccggcggc
 60
 ggcccgacta tctccggtgg tgaagtactc atgcaacgcg cttttgcgtg gaacttgctc
 120
 atgagtgcta agtcgatggg cattcatacc tgtatcgata cctccggttt tttgggggct
 180
 gcggcaacag atgacttttt agagtctggt gatttggtgt tgctcgacgt caaatcgggg
 240
 gatgaagaaa tctaccgtgc cctcaccggc agagcgttgc aacctaccat cgattttggt
 300
 gatcgtctca ccgcgctcgg taaagaaatc tggattcggg tcggttggtg ccccggtatc
 360
 accgactcgg tagagaacgt ggaaaagggt gccgatatcg tccgcagatg gcgcaccgct
 420

gtttcacgcg t
431

<210> 1666
<211> 143
<212> PRT
<213> Homo sapiens

<400> 1666
Ala Ser Glu Leu Ile Lys Lys Leu Lys Arg Tyr Lys Met Val Leu Arg
1 5 10 15
Ser Thr Gly Gly Gly Pro Thr Ile Ser Gly Gly Glu Val Leu Met Gln
20 25 30
Arg Ala Phe Ala Trp Asn Leu Leu Met Ser Ala Lys Ser Met Gly Ile
35 40 45
His Thr Cys Ile Asp Thr Ser Gly Phe Leu Gly Ala Ala Ala Thr Asp
50 55 60
Asp Phe Leu Glu Ser Val Asp Leu Val Leu Leu Asp Val Lys Ser Gly
65 70 75 80
Asp Glu Glu Ile Tyr Arg Ala Leu Thr Gly Arg Ala Leu Gln Pro Thr
85 90 95
Ile Asp Phe Gly Asp Arg Leu Thr Ala Leu Gly Lys Glu Ile Trp Ile
100 105 110
Arg Phe Val Val Val Pro Gly Tyr Thr Asp Ser Val Glu Asn Val Glu
115 120 125
Lys Val Ala Asp Ile Val Arg Arg Trp Arg Thr Ala Val Ser Arg
130 135 140

<210> 1667
<211> 370
<212> DNA
<213> Homo sapiens

<400> 1667
tccgctgaga ccagcggttg tgacttccca ggtgagactg tccgcacat ggccaagatc
60
gttgagtcta ctgaggcccg tggcttggac aagatcgcca agatcgactg ggatccgcac
120
accaccagtg gcatcatgtc gaaggcagct gctgagatcg ctgagcgcgc cgaggccaag
180
ttcatcgtgg cctttaccaa gtccggtgac accgcccgtc gtatcgctcg tctgcgtccg
240
agcaccgccg tcatcgtttt cacctctgat gagaccacga ccaagaccct cgcctggggtc
300
tggggcgctc acgccgtcgt taccocggtg ttttaagaatg cggaggagct gtaccgctgg
360
gttaacgcgt
370

<210> 1668
<211> 123
<212> PRT
<213> Homo sapiens

<400> 1668

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Ser Ala Glu Thr Ser Val Gly Asp Phe Pro Gly Glu Thr Val Arg Thr
 1           5           10           15
Met Ala Lys Ile Val Glu Ser Thr Glu Ala Arg Gly Leu Asp Lys Ile
      20           25           30
Ala Lys Ile Asp Trp Asp Pro His Thr Thr Ser Gly Ile Met Ser Lys
      35           40           45
Ala Ala Ala Glu Ile Ala Glu Arg Ala Glu Ala Lys Phe Ile Val Ala
      50           55           60
Phe Thr Lys Ser Gly Asp Thr Ala Arg Arg Ile Ala Arg Leu Arg Pro
65           70           75           80
Ser Thr Pro Leu Ile Val Phe Thr Ser Asp Glu Thr Thr Thr Lys Thr
      85           90           95
Leu Ala Trp Val Trp Gly Ala His Ala Val Val Thr Pro Val Phe Lys
      100          105          110
Asn Ala Glu Glu Leu Tyr Arg Trp Val Asn Ala
      115          120

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<210> 1669

<211> 1491

<212> DNA

<213> Homo sapiens

<400> 1669

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ggatcctgca gtggtgatct gtcacgtca cgtcacagaa ctgaacatgg aaatgaacaa
60
cgaaaactcc acccccttct caaacgagtt attcctagct cgcctccag tccttgcttc
120
tcccagcctt ggtggtaatt agcttgaaag tgggaacgag agtgcggtcc gcaaagaaag
180
gacttctggt tagacactga aatacaaaac gactgccaac gagctctggg caaagctgcc
240
ccgtcttctt ttttcgaaag accctcaaaa actgccttct cttctgctac caaaacttgg
300
gccctagaaa gtggctgcgg agtggagcag atggacatca ctgagaatgg tagaggaggg
360
gctgtgtttt ctgaggggga gtcattggcag cttgtgctgg gggccaggaa gggaaaaaac
420
caatctggca ttcaggttgt ggaaggcaaa gtgaaacaag aagtcatttg ggaaaatatt
480
atattataaa cacatagaat aatatgtaca cgctcatata catcccaaag agaagcctca
540
aggagtccg tttcttctca aaagaaactt cactatgata aagcattcct atagtgggaa
600
ttaactacaa tgaaataatt taacaatttc atttatgcta tatctgtgtc cactacagag
660
tctacggtga aggctgtgtg gagcgagtgt gtctagtggc ctgaaacacc aacgcgttct
720
tcaaaaatag gcaatgacct gtttttttct attcacattt acaatagcta cacagtgatg
780
aaacgcagac tgaaaaatca aatggcagga cgatggaact gtcgtcaagg ttctcagact
840
tgtggcttct gcacctgtta tactttttgga tacgagttag ctccacttag cttcgttaag
900

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attagaaatt tccatgaaac acttaccac atataaatc tgtgtaaagc tttatttttt
 960
 tccccaccta ctttaatttt ttttaaaaag tgaaataaga ggaaaaactc ttataaaata
 1020
 taagggtttta catacgagag agcgaggaac accccggagg ctgccggtgc gtgtggcttc
 1080
 atgtttctgt gctacatgag tctagtgtcc tcatcttcca ttgtgacaac ctttctcccc
 1140
 ccatcacact gtcaatgagc tctaggcaaa gctgccccgt ttgcttttaa cctaagggat
 1200
 gctgtggttt ggttgactac atttgactac caccactgaa ggcgggcgac gtctgaagcg
 1260
 gctggatacc gcaacgatgg aaaatcaggc gaggtactag cgtggagggc cgggctgcc
 1320
 ggtcaaggtc gtctgggttc tcaggagcca gtctgtgcc cagaaccatc ggcagctgcc
 1380
 ttcgtaaggc acctcggtct ggcattcgga aaaccacccc atcttgccag agtcccttgg
 1440
 tccttgggta gcaaaagccg tatgcatct aaatcaagct ttcaatcatg a
 1491

<210> 1670

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1670

Met	Pro	Asp	Trp	Phe	Phe	Pro	Phe	Leu	Ala	Pro	Ser	Thr	Ser	Cys	His
1				5					10					15	
Asp	Ser	Pro	Ser	Glu	Asn	Thr	Ala	Pro	Pro	Leu	Pro	Phe	Ser	Val	Met
			20					25					30		
Ser	Ile	Cys	Ser	Thr	Pro	Gln	Pro	Leu	Ser	Arg	Ala	Gln	Val	Leu	Val
		35					40					45			
Ala	Glu	Gly	Lys	Ala	Val	Phe	Glu	Gly	Leu	Ser	Lys	Lys	Glu	Asp	Gly
	50					55					60				
Ala	Ala	Leu	Pro	Arg	Ala	Arg	Trp	Gln	Ser	Val	Cys	Ile	Ser	Val	Ser
65				70					75					80	
Asn	Gln	Lys	Ser	Phe	Leu	Cys	Gly	Pro	His	Ser	Arg	Ser	His	Phe	Gln
				85				90						95	
Ala	Asn	Tyr	His	Gln	Gly	Trp	Glu	Arg	Gln	Gly	Leu	Gly	Ala	Glu	Leu
			100					105					110		
Gly	Ile	Thr	Arg	Leu	Arg	Arg	Gly	Trp	Ser	Phe	Arg	Cys	Ser	Phe	Pro
		115					120					125			
Cys	Ser	Val	Leu												
			130												

<210> 1671

<211> 432

<212> DNA

<213> Homo sapiens

<400> 1671

gcgcgccggg gcgggaggac gccagtcgtc ttcccgcccc tcaccacgac acgaccatta
 60

tcgcgacgaa ggaagcccat ggctgaaacc acatcgccgg cacagcggaa acccacggcg
 120
 gcaccccgca tgaagccggt gtcgcgggtc ggggacacga ttttcgctgg cgcctcgtcg
 180
 gttattgcca tagccctggc cgtcatcgtc atcctgatgt tcgtcttctt catgaagacg
 240
 gcagccccga cgttgttggc taacaccgat aactttttca cgtccccggc ttggacaacg
 300
 gatcagaacc cgccggcctt tggatccag gccctgctat ggacgacagt catctcatcc
 360
 ctgcttgccc tgctcatcgc agtgccgctc tcggtgggca tcgctctgtt tatcaccag
 420
 ctgcaccta gg
 432

<210> 1672

<211> 144

<212> PRT

<213> Homo sapiens

<400> 1672

Ala	Arg	Arg	Gly	Gly	Arg	Thr	Pro	Val	Val	Phe	Pro	Pro	Leu	Thr	Thr
1			5					10					15		
Thr	Arg	Pro	Leu	Ser	Arg	Arg	Arg	Lys	Pro	Met	Ala	Glu	Thr	Thr	Ser
			20					25					30		
Pro	Ala	Gln	Arg	Lys	Pro	Thr	Ala	Ala	Ser	Arg	Met	Lys	Pro	Val	Ser
		35					40					45			
Arg	Val	Gly	Asp	Thr	Ile	Phe	Ala	Gly	Ala	Ser	Ser	Val	Ile	Ala	Ile
	50					55					60				
Ala	Leu	Ala	Val	Ile	Val	Ile	Leu	Met	Phe	Val	Phe	Leu	Met	Lys	Thr
65					70					75				80	
Ala	Ala	Pro	Thr	Leu	Leu	Ala	Asn	Thr	Asp	Asn	Phe	Phe	Thr	Ser	Arg
				85					90					95	
Ala	Trp	Thr	Thr	Asp	Gln	Asn	Pro	Pro	Ala	Phe	Gly	Ile	Gln	Ala	Leu
			100					105					110		
Leu	Trp	Thr	Thr	Val	Ile	Ser	Ser	Leu	Leu	Ala	Leu	Leu	Ile	Ala	Val
		115				120						125			
Pro	Leu	Ser	Val	Gly	Ile	Ala	Leu	Phe	Ile	Thr	Gln	Leu	Ala	Pro	Arg
	130					135						140			

<210> 1673

<211> 401

<212> DNA

<213> Homo sapiens

<400> 1673

tcgcgagcac actccagcct ctggggcgctc tgccagggcc tctgtgtttt gatatactct
 60
 gacctggcag tgaagctgct gatgaatgca cgacaaagac cagtttgctc cgtaacccca
 120
 ggctcccagc gtctttttcca tgagccaaag gcctggctcct ggaggggggt gccctgcagc
 180
 tctgctggcc ttcttccagg ggagttcatt gctgggggtg gccctgcagg gacctccact
 240

gtgctgggga ggggaagaag aaggatgcaa cagggggagg ggagaatttg agaaaatagg
 300
 atgcaaattc tccacttggtg aataaagaaa tagagagcca ttgctaagaa ctatgtttac
 360
 gcagggttag tgctgggacc cagaaccagt caactgggtt t
 401

<210> 1674

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1674

Met	Ala	Leu	Tyr	Phe	Phe	Ile	His	Lys	Trp	Arg	Ile	Cys	Ile	Leu	Phe
1				5					10					15	
Ser	Gln	Ile	Leu	Pro	Ser	Pro	Cys	Cys	Ile	Leu	Leu	Leu	Pro	Leu	Pro
			20					25					30		
Ser	Thr	Val	Glu	Val	Pro	Ala	Gly	Pro	Pro	Pro	Ala	Met	Asn	Ser	Pro
		35					40					45			
Gly	Arg	Arg	Pro	Ala	Glu	Leu	Gln	Gly	Thr	Pro	Leu	Gln	Asp	Gln	Ala
	50					55					60				
Phe	Gly	Ser	Trp	Lys	Arg	Arg	Trp	Glu	Pro	Gly	Val	Thr	Glu	Gln	Thr
65					70					75				80	
Gly	Leu	Cys	Arg	Ala	Phe	Ile	Ser	Ser	Phe	Thr	Ala	Arg	Ser	Glu	Tyr
				85					90					95	
Ile	Lys	Thr	Gln	Arg	Pro	Trp	Gln	Thr	Pro	Gln	Arg	Leu	Glu	Cys	Ala
			100					105						110	

Arg

<210> 1675

<211> 500

<212> DNA

<213> Homo sapiens

<400> 1675

gccggcgcac ccacctggga cgtggtgaaa tcggcaaaac tcacctcttt agctacctgc
 60
 gcgccaaccg cacgggcagc ctcccacacg ccctctagag cgctgctgga cagaatggct
 120
 tgattgtttg gcatgctctc aggatacccg tttagccagg aaacaccggg aggcttgcta
 180
 ctatgcgagc agccgacgca cgggtagagg gaattcccac cacagtcctt cgcactccac
 240
 ccgcacacgc cctgggaacc gtcaccccg gtagccacgg gtcaatcggc tccgcaaatg
 300
 cgaccgctgg atgtgccacc accccgcnc a tccgcagtgc gctccgtaac gccgtctgca
 360
 acaccgtccc ctccgtatct gccgacacct gtgccaacac ttgtaccgat gcatgcaccg
 420
 atgcagcaac aggcgctccg ctccgtatcg atctgggata cggcgccgcc ccctggacca
 480
 ctgttgagat ggctacgcgt
 500

<210> 1676
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 1676
 Arg Glu Phe Pro Pro Gln Ser Leu Ala Leu His Pro His Thr Pro Trp
 1 5 10 15
 Glu Pro Ser Pro Ala Val Pro Pro Gly Gln Ser Ala Pro Gln Met Arg
 20 25 30
 Pro Leu Asp Val Pro Pro Pro Arg Xaa Ser Ala Val Arg Ser Val Thr
 35 40 45
 Pro Ser Ala Thr Pro Ser Pro Pro Tyr Leu Pro Thr Pro Val Pro Thr
 50 55 60
 Leu Val Pro Met His Ala Pro Met Gln Gln Gln Ala Leu Arg Ser Leu
 65 70 75 80
 Ser Ile Trp Asp Thr Ala Pro Pro Pro Gly Pro Leu Leu Arg Trp Leu
 85 90 95
 Arg

<210> 1677
 <211> 631
 <212> DNA
 <213> Homo sapiens

<400> 1677
 nntcatgatt tcctcaatga tgccaagggtg atggaggccg gctataacctg ggtgcagggtg
 60
 gatttgcgcg gtacgggtgc ttctactggg tgtttgngac tggaatggtc cnnccggggag
 120
 cagcaggatg ttgtgaccgc cgtggaatgg gcggcgggtac agccgtggtc gaatggtcgg
 180
 gtggggccttt tcggtaaata ctacgatggg gggacgggggt cttattgctg caggtaatca
 240
 gccgcggggg ttggctgctg tgggtggcgca ggagccagct atggagccct acacttacct
 300
 gtataacaat gaggtccttt actacaacgc tattggtacg agcctttctt atgatgagat
 360
 tgctgcctcc cccggccgtg tccttcacga cactcccgaa tatatgaaga acagtgtcta
 420
 cgagggtggcc caccgcgatt gcctgtccga caatttgctt aattcttttag accccatccg
 480
 tagccacaaa taatggggcg gatcggtctt tccctcacca agacgcataa tttccccgt
 540
 gcccttgctt atttccgctg gccttattga ggacaatacg gagcctgatg gtttggtgga
 600
 attgttgaag gaccgtaagg ctccgacgcg t
 631

<210> 1678
 <211> 78
 <212> PRT

<213> Homo sapiens

<400> 1678

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Xaa His Asp Phe Leu Asn Asp Ala Lys Val Met Glu Ala Gly Tyr Thr
 1           5           10           15
Trp Val Gln Val Asp Leu Arg Gly Thr Gly Ala Ser Thr Gly Cys Leu
           20           25           30
Xaa Leu Glu Trp Ser Xaa Gly Glu Gln Gln Asp Val Val Thr Ala Val
           35           40           45
Glu Trp Ala Ala Val Gln Pro Trp Ser Asn Gly Arg Val Gly Leu Phe
           50           55           60
Gly Lys Ser Tyr Asp Gly Gly Thr Gly Ser Tyr Cys Cys Arg
65           70           75

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<210> 1679

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1679

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nctacttaga gcaaaggtag gaaaagaagg cagctaggcg tggtctcat tccttccac
60
agaatggatt ataagtcgag cctgatccag gatgggaatc ccatggagaa cttggagaag
120
cagctgatct gccctatctg cctggagatg ttacccaagc cagtggatcat cttgccgtgc
180
cagcacaacc tgtgccgga gtgtgccaat gacatcttcc aggtcgcaaa tcctactgg
240
accagccggg gcagctcagt gtccatgtct ggaggccgtt tccgctgccc tacctgccgc
300
cacgaggtga tcatggatcg tcacggagtg tacggcctgc agaggaacct gctggtggag
360
aacatcatcg acatctacaa acaggagtgc tccagtcggc cgctgcagaa gggcagtcac
420
cccatgtaca aggagcacga agatgagaaa atcaacatct actgtctcac gtgtgaggtg
480
cccacctgct ccatgtgcaa ggtgtttggg atccacaagg cctgcgaggt g
531

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<210> 1680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 1680

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Met Glu Asn Leu Glu Lys Gln Leu Ile Cys Pro Ile Cys Leu Glu Met
 1           5           10           15
Phe Thr Lys Pro Val Val Ile Leu Pro Cys Gln His Asn Leu Cys Arg
           20           25           30
Lys Cys Ala Asn Asp Ile Phe Gln Ala Ala Asn Pro Tyr Trp Thr Ser
           35           40           45
Arg Gly Ser Ser Val Ser Met Ser Gly Gly Arg Phe Arg Cys Pro Thr
           50           55           60
Cys Arg His Glu Val Ile Met Asp Arg His Gly Val Tyr Gly Leu Gln

```

```

65          70          75          80
Arg Asn Leu Leu Val Glu Asn Ile Ile Asp Ile Tyr Lys Gln Glu Cys
          85          90          95
Ser Ser Arg Pro Leu Gln Lys Gly Ser His Pro Met Tyr Lys Glu His
          100          105          110
Glu Asp Glu Lys Ile Asn Ile Tyr Cys Leu Thr Cys Glu Val Pro Thr
          115          120          125
Cys Ser Met Cys Lys Val Phe Gly Ile His Lys Ala Cys Glu Val
          130          135          140

```

<210> 1681

<211> 396

<212> DNA

<213> Homo sapiens

<400> 1681

```

gagttccaca actgcaggac agatgacaag acgttccaat gtgagatgtg tttcagattc
60
ttttccacca acagcaacct ctccaagcac aagaagaagc acggcgacaa gaagtttgcc
120
tgtgaggtct gcagcaagat gttctaccgc aaggacgtca tgctggacca ccagcgccgg
180
cacnctggaa ggagtgcggc gagtgaagcg nnagaggacc tggaggccgg tggggagaac
240
ctggtcggtt acaagaagga gccttccggg tgcccgggtgt gtggcaagggt gttctcctgc
300
cggagcaata tgaacaagca cctgctcacc cacggcgaca agaagtacac ctgcgagatc
360
tgcgggcgca agttcttccg cgtggatgtg ctcagg
396

```

<210> 1682

<211> 132

<212> PRT

<213> Homo sapiens

<400> 1682

```

Glu Phe His Asn Cys Arg Thr Asp Asp Lys Thr Phe Gln Cys Glu Met
1      5      10      15
Cys Phe Arg Phe Phe Ser Thr Asn Ser Asn Leu Ser Lys His Lys Lys
20     25     30
Lys His Gly Asp Lys Lys Phe Ala Cys Glu Val Cys Ser Lys Met Phe
35     40     45
Tyr Arg Lys Asp Val Met Leu Asp His Gln Arg Arg His Xaa Gly Arg
50     55     60
Ser Ala Ala Ser Glu Ala Xaa Glu Asp Leu Glu Ala Gly Gly Glu Asn
65     70     75     80
Leu Val Arg Tyr Lys Lys Glu Pro Ser Gly Cys Pro Val Cys Gly Lys
85     90     95
Val Phe Ser Cys Arg Ser Asn Met Asn Lys His Leu Leu Thr His Gly
100    105    110
Asp Lys Lys Tyr Thr Cys Glu Ile Cys Gly Arg Lys Phe Phe Arg Val
115    120    125
Asp Val Leu Arg

```

130

<210> 1683

<211> 676

<212> DNA

<213> Homo sapiens

<400> 1683

```

nncggccgga caggtcccga gcagccccgc ccaacatgga cccagacccc caggcgggcg
60
tgcaggtggg catgcgggtg gtgcgcggcg tggaccggaa gtggggccag caggacggcg
120
gcgagggcgg cgtgggcacg gtggtggagc ttggccgcca cggcagcccc tcgacacccg
180
accgcacagt ggtcgtgcag tgggaccagg gcacgcgcac caactaccgc gccggctacc
240
agggcgcgca cgacctgctg ctgtacgaca acgcccagat cggcgtccgg caccccaaca
300
tcatctgtga ctgctgcaag aagcacgggc tgcgggggat gcgctggaag tgccgtgtgt
360
gcctggacta cgacctctgc acgcagtgtt acatgcacaa caagcatgag ctgcgccacg
420
ccttcgaccg ctacgagacc gctcactcgc gccctgtcac actgagtccc cgccagggcc
480
tcccgaggat cccactaagg ggcattcttc agggagcgaa ggtggtgcga ggccccgact
540
gggagtgggg ctcacaggat ggtgagtggg ggcagagggg cggggtcagg gctgggctgt
600
ggctggctca tggctcagcc ttagcctgct gggggggcct ctttcccag gagggaaggg
660
aaaccgggcc gccgga
676

```

<210> 1684

<211> 154

<212> PRT

<213> Homo sapiens

<400> 1684

```

Xaa Gly Arg Thr Gly Pro Glu Gln Pro Arg Pro Thr Trp Thr Gln Thr
1           5           10           15
Pro Arg Arg Ala Cys Arg Trp Ala Cys Gly Trp Cys Ala Ala Trp Thr
20           25           30
Gly Ser Gly Ala Ser Arg Thr Ala Ala Arg Ala Ala Trp Ala Arg Trp
35           40           45
Trp Ser Leu Ala Ala Thr Ala Ala Pro Arg His Pro Thr Ala Gln Trp
50           55           60
Ser Cys Ser Gly Thr Arg Ala Arg Ala Pro Thr Thr Ala Pro Ala Thr
65           70           75           80
Arg Ala Arg Thr Thr Cys Cys Cys Thr Thr Thr Pro Arg Ser Ala Ser
85           90           95
Gly Thr Pro Thr Ser Ser Val Thr Ala Ala Arg Ser Thr Gly Cys Gly
100          105          110
Gly Cys Ala Gly Ser Ala Val Cys Ala Trp Thr Thr Thr Ser Ala Arg

```

115 120 125
 Ser Ala Thr Cys Thr Thr Ser Met Ser Ser Pro Thr Pro Ser Thr Ala
 130 135 140
 Thr Arg Pro Leu Thr Arg Ala Leu Ser His
 145 150

<210> 1685
 <211> 2740
 <212> DNA
 <213> Homo sapiens

<400> 1685
 ngaggaggag cggcgggcgg ctccggggaa agggaggggg gcgctccgca gccgcccgg
 60
 cccaggggct ggcgagggaa aggcgtacgc gctcagcaga ggggcggcag cggcggggag
 120
 ggggcctccc cttctccatc ctctctttct gcgggcaaaa cccaggaac cggcagcaga
 180
 aactccggaa gcggcggttc gggggcgggc agcgggtggtg gagggagcta ctggaaagaa
 240
 ggatgtctgc agtctgagct catccagttc catctcaaga aggagcgggc ggcagcggcg
 300
 gcggcccgcg ctcagatgca cgctaagaac ggcggcggca gcagtagccg cagctccccg
 360
 gtgtctggcc cccctgccgt ttgcgagacc ctggccgtcg cctccgcctc cccaatggcg
 420
 gcggcggcgg agggcccccga gcagagcgca gagggcagcg cgagcggcgg gggcatgcag
 480
 gcggcagcgc ccccttcgtc gcagccgcac ccgcagcagc tccaagagca ggaagaaatg
 540
 caagaggaga tggagaagct gcgagaggaa aacgagactc tcaagaacga gatcgatgag
 600
 ctgagaaccg agatggacga gatgaggagc actttcttcg aggaggatgc ctgtcaactg
 660
 caggaaatgc gccacgagtt ggagagagcc aacaaaaact gccggatcct gcagtaccgc
 720
 ctccgcaaag ccgagcgcaa aaggctccgc tacgcccaga ccgggggaaat cgacggggag
 780
 ctgttgcgca gcctggagca ggacctcaag gttgcaaagg atgtatctgt gagacttcac
 840
 catgaattag aaaatgtgga agaaaagaga acaacaacag aagatgaaaa tgagaaactg
 900
 aggcaacagc tcatagaagt tgaaattgca aagcaagctt tacagaatga actggaaaaa
 960
 atgaaagagt tatccttaaa aagaagagga agcaaagatt tgccaaaatc tgaaaaaaag
 1020
 gctcaacaga ctcccacaga ggaggacaat gaagatctga agtgccagct gcagtttggt
 1080
 aaggaagaag ccgctttgat gagaaagaaa atggccaaga ttgataaaga aaaggacaga
 1140
 tttgaacacg agctccagaa gtacagatcc ttttatgggg atctggacag tcctttgccc
 1200
 aaaggagaag ccggaggccc tcccagcact agggaggccg agctcaagct acggctaagg
 1260

ctggtggagg aagaagccaa catcctgggc aggaaaatcg tcgaactgga ggtggagaac
1320
agaggcctga aggcggaact ggacgacctt aggggcgatg acnnttcaac ggctcggcca
1380
accgcctcat gaggnagca gagcgaatcc ctgtcggagc tgcggcagca cctgcagctg
1440
gtggaagacg agacggagct gctgcggagg aacgtggccg acctggagga gcagaacaag
1500
cgcatcacgg cggagctcaa caagtacaag tacaagnntc cggcggccac gacagcgcgc
1560
ggcaccacga caacgccana gaccgaggcc ctgcaggagg agctgaaggc ggcgcgctg
1620
cagatcaacg agctcagcgg caaggtcatg cagctgcagt acgagaaccg cgtgcttatg
1680
tccaacatgc agcgctacga cctggcctcg cacctgggca tccgcggcag ccccgcgac
1740
agcgacgccg agagcgacgc gggcaagaag gagagcgacg acgactcgcg gcctccgcac
1800
cgcaagcgcg aaggggcccat cggcggcgag agcgactcgg aggaggtggn cgcaacatcc
1860
gctgcctcan cgcccactcg ctctttctac cggcgcccg ggccctggcc caagagcttc
1920
tccgatcggc agcagatgaa ggacatccgc tcggaggccg agcgccctggg caagaccatc
1980
gaccggctca tcgccgacac gagcaccatc atcaccgagg cgcgcacnt acgtggccaa
2040
cggggacctg ttnnccgact catggacgag gaggacgacg gcagccgcat ccgggagcac
2100
gagctgctct accgcatcaa cgctcagatg aaggccttcc gcaaggagct gcagaccttc
2160
atcgaccgcc tcgaggtgcc caagtctgcg gacgaccgcg gcgccgagga gccatttcc
2220
gtgagtcaga tgttccagcc tatcatttta cttattctca ttcttgatt attttcatca
2280
ctttcttaca caacaatatt taaacttgtc ttcttttta cactgtttt tgtactgtaa
2340
atctttcatc atttaccatt cattgtagta ttttcagttt gtttattttg ttcaccttc
2400
aagacaagaa gtaaaagaag tataatttct gtagtaacca atgctataaa aacactgaag
2460
actgcttatt tctttacaaa gatacaactc atcttaccaa gaccaaattc aataagaagc
2520
ccaaacacta aaatatttca ggtaagaaag tgtgacattt ttctgtatga attgttttaa
2580
tttttacttc ttttttcat cctgtttgtc tcctcttgat aaataattgg catactgaat
2640
ataaaaatgg actacatgtc tcataattat ttctcagtag ttcactatta ttattcaaaa
2700
gctggacgga cattcacaat ttggtcacat ttccaaaaag
2740

<210> 1686

<211> 463

<212> PRT

<213> Homo sapiens

<400> 1686

Xaa Gly Gly Ala Gly Gly Gly Ser Gly Glu Arg Glu Gly Gly Ala Pro
 1 5 10 15
 Gln Pro Pro Pro Pro Arg Gly Trp Arg Gly Lys Gly Val Arg Ala Gln
 20 25 30
 Gln Arg Gly Gly Ser Gly Gly Glu Gly Ala Ser Pro Ser Pro Ser Ser
 35 40 45
 Ser Ser Ala Gly Lys Thr Pro Gly Thr Gly Ser Arg Asn Ser Gly Ser
 50 55 60
 Gly Val Ala Gly Gly Gly Ser Gly Gly Gly Gly Ser Tyr Trp Lys Glu
 65 70 75 80
 Gly Cys Leu Gln Ser Glu Leu Ile Gln Phe His Leu Lys Lys Glu Arg
 85 90 95
 Ala Ala Ala Ala Ala Ala Ala Ala Gln Met His Ala Lys Asn Gly Gly
 100 105 110
 Gly Ser Ser Ser Arg Ser Ser Pro Val Ser Gly Pro Pro Ala Val Cys
 115 120 125
 Glu Thr Leu Ala Val Ala Ser Ala Ser Pro Met Ala Ala Ala Glu
 130 135 140
 Gly Pro Gln Gln Ser Ala Glu Gly Ser Ala Ser Gly Gly Gly Met Gln
 145 150 155 160
 Ala Ala Ala Pro Pro Ser Ser Gln Pro His Pro Gln Gln Leu Gln Glu
 165 170 175
 Gln Glu Glu Met Gln Glu Glu Met Glu Lys Leu Arg Glu Glu Asn Glu
 180 185 190
 Thr Leu Lys Asn Glu Ile Asp Glu Leu Arg Thr Glu Met Asp Glu Met
 195 200 205
 Arg Asp Thr Phe Phe Glu Glu Asp Ala Cys Gln Leu Gln Glu Met Arg
 210 215 220
 His Glu Leu Glu Arg Ala Asn Lys Asn Cys Arg Ile Leu Gln Tyr Arg
 225 230 235 240
 Leu Arg Lys Ala Glu Arg Lys Arg Leu Arg Tyr Ala Gln Thr Gly Glu
 245 250 255
 Ile Asp Gly Glu Leu Leu Arg Ser Leu Glu Gln Asp Leu Lys Val Ala
 260 265 270
 Lys Asp Val Ser Val Arg Leu His Glu Leu Glu Asn Val Glu Glu
 275 280 285
 Lys Arg Thr Thr Thr Glu Asp Glu Asn Glu Lys Leu Arg Gln Gln Leu
 290 295 300
 Ile Glu Val Glu Ile Ala Lys Gln Ala Leu Gln Asn Glu Leu Glu Lys
 305 310 315 320
 Met Lys Glu Leu Ser Leu Lys Arg Arg Gly Ser Lys Asp Leu Pro Lys
 325 330 335
 Ser Glu Lys Lys Ala Gln Gln Thr Pro Thr Glu Glu Asp Asn Glu Asp
 340 345 350
 Leu Lys Cys Gln Leu Gln Phe Val Lys Glu Glu Ala Ala Leu Met Arg
 355 360 365
 Lys Lys Met Ala Lys Ile Asp Lys Glu Lys Asp Arg Phe Glu His Glu
 370 375 380
 Leu Gln Lys Tyr Arg Ser Phe Tyr Gly Asp Leu Asp Ser Pro Leu Pro
 385 390 395 400
 Lys Gly Glu Ala Gly Gly Pro Pro Ser Thr Arg Glu Ala Glu Leu Lys

```

                405                410                415
Leu Arg Leu Arg Leu Val Glu Glu Glu Ala Asn Ile Leu Gly Arg Lys
                420                425                430
Ile Val Glu Leu Glu Val Glu Asn Arg Gly Leu Lys Ala Glu Leu Asp
                435                440                445
Asp Leu Arg Gly Asp Asp Xaa Ser Thr Ala Arg Pro Thr Arg Ser
                450                455                460

```

<210> 1687
 <211> 326
 <212> DNA
 <213> Homo sapiens

```

<400> 1687
gtgcacacag gtgagcgtcc ctacaagtgt ccacactgcg actatgcagg taccagtcg
60
ggctcgctca agtatcacct tcagcgtcac caccgagagc agaagaacag tgcggggtcc
120
tgggcctccc ccagaacccc cgccaccttc ccagcggggc tcaactgcagc cgcagtcagg
180
agccaagcca actcaggcct cagccacctg ggtagagggc actgcaagta cccggcctcc
240
ttcgagcagc accggaccag ggtcccgtag gaagcctgct agccctggga ggacctgcg
300
aaacggcgat gtggtgaagc cgaact
326

```

<210> 1688
 <211> 89
 <212> PRT
 <213> Homo sapiens

```

<400> 1688
Val His Thr Gly Glu Arg Pro Tyr Lys Cys Pro His Cys Asp Tyr Ala
1      5      10      15
Gly Thr Gln Ser Gly Ser Leu Lys Tyr His Leu Gln Arg His His Arg
20     25     30
Glu Gln Lys Asn Ser Ala Gly Ser Trp Ala Ser Pro Arg Thr Pro Ala
35     40     45
Thr Phe Pro Ala Gly Leu Thr Ala Ala Ala Val Arg Ser Gln Ala Asn
50     55     60
Ser Gly Leu Ser His Leu Gly Arg Gly His Cys Lys Tyr Pro Ala Ser
65     70     75     80
Phe Glu Gln His Arg Thr Arg Val Pro
85

```

<210> 1689
 <211> 301
 <212> DNA
 <213> Homo sapiens

```

<400> 1689
nggggaagcc atggctgctt aaggacaatg cactgtcagc tccgtgatgt cttgatttgg
60

```


tctgggattc tgcacttagt aattgcagat aatactcatg tggcgccaag gaaaaaaaaa
 120
 ttggcctttt cccagtccat taagcctaaa caaaccacat cactttacat caggcagatc
 180
 atgtggtacc agaattttcc agtttggcgg actatcttga tcaaatacaac taaattattg
 240
 ccactgtggc tatctgtgaa agaacacaat gaagaaaatc tggagcctta tctcatactc
 300
 a
 301

<210> 1690

<211> 91

<212> PRT

<213> Homo sapiens

<400> 1690

Met	His	Cys	Gln	Leu	Gly	Asp	Val	Leu	Ile	Trp	Ser	Gly	Ile	Leu	His
1				5					10					15	
Leu	Val	Ile	Ala	Asp	Asn	Thr	His	Val	Ala	Pro	Arg	Lys	Lys	Lys	Leu
			20					25					30		
Ala	Phe	Ser	Gln	Ser	Ile	Lys	Pro	Lys	Gln	Thr	Thr	Ser	Leu	Tyr	Ile
		35				40						45			
Arg	Gln	Ile	Met	Trp	Tyr	Gln	Asn	Phe	Pro	Val	Trp	Arg	Thr	Ile	Leu
	50					55					60				
Ile	Lys	Ser	Thr	Lys	Leu	Leu	Pro	Leu	Trp	Leu	Ser	Val	Lys	Glu	His
65				70						75				80	
Asn	Glu	Glu	Asn	Leu	Glu	Pro	Tyr	Leu	Ile	Leu					
			85						90						

<210> 1691

<211> 483

<212> DNA

<213> Homo sapiens

<400> 1691

nacgcgttcc ggtatgccga tgggcgggtg ctgctggggc tccgccggcg gcgcggtgag
 60
 ttgtgccttg aagtgtggga ccgcggcccc ggcattcctc aagacaaaca aaagtcattc
 120
 ttcgaagaat tcaaacgcct ggacagtcac cagaccgcg ccgagaaagg cctgggcctg
 180
 ggccctggcg ttgccgacgg cttgtgcccg gtgctcgggc atcgcttgag cgtgcgttcg
 240
 tggccgggca agggcagcgt gttcagcgtg cgcgtgccgt tggcgcgcac ccaggtcagc
 300
 gcgcctgccca agccggcgca ggaaagcggc cagccgttga gtggcgcgca ggtgctgtgt
 360
 gtgaataaca aagaaagcat cctgatcggc atgcgcagct tgctcccgcg ctggggctgc
 420
 gaagtctggc ccgcgcgcga ccaggcgcaa tgtgccgcgc tgttggtga ggggtgtgcg
 480
 ccg
 483

<210> 1692
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 1692
 Xaa Ala Phe Arg Tyr Ala Asp Gly Pro Val Leu Leu Gly Val Arg Arg
 1 5 10 15
 Arg Arg Gly Glu Leu Cys Leu Glu Val Trp Asp Arg Gly Pro Gly Ile
 20 25 30
 Pro Gln Asp Lys Gln Lys Ser Phe Phe Glu Glu Phe Lys Arg Leu Asp
 35 40 45
 Ser His Gln Thr Arg Ala Glu Lys Gly Leu Gly Leu Gly Leu Ala Ile
 50 55 60
 Ala Asp Gly Leu Cys Arg Val Leu Gly His Arg Leu Ser Val Arg Ser
 65 70 75 80
 Trp Pro Gly Lys Gly Ser Val Phe Ser Val Arg Val Pro Leu Ala Arg
 85 90 95
 Thr Gln Val Ser Ala Pro Ala Lys Pro Ala Gln Glu Ser Gly Gln Pro
 100 105 110
 Leu Ser Gly Ala Gln Val Leu Cys Val Asn Asn Lys Glu Ser Ile Leu
 115 120 125
 Ile Gly Met Arg Ser Leu Leu Pro Arg Trp Gly Cys Glu Val Trp Pro
 130 135 140
 Ala Arg Asp Gln Ala Gln Cys Ala Ala Leu Leu Ala Glu Gly Val Arg
 145 150 155 160
 Pro

<210> 1693
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1693
 acgcgtgttc catctgcagc cgtgcgaaaa ctctcccacc atgtcgcaga ctggatactt
 60
 cgaggattca agctactaca agtgtgacac agatgacacc ttcgaagccc gagaggagat
 120
 actggggggg atgaggcctt cgacactgcc aactcctcca tcgtgtcttg cgagagtatc
 180
 cgtttttttt tcaatgtcaa ccttgagatg caggccacca aactgagaa tgaagcgact
 240
 tccggtggct gtgtgtctct gcacacctcc cgaaaggcca gcatcgctct gaacgagacg
 300
 gccacctccc tggataacgt gctgcggacc atg
 333

<210> 1694
 <211> 110
 <212> PRT
 <213> Homo sapiens

<400> 1694

```

Met Val Arg Ser Thr Leu Ser Arg Glu Val Ala Val Ser Phe Arg Thr
 1             5             10             15
Met Leu Ala Phe Arg Glu Val Cys Arg Ser Thr Gln Pro Pro Glu Val
             20             25             30
Ala Ser Phe Ser Val Leu Val Ala Cys Ile Ser Arg Leu Thr Leu Thr
             35             40             45
Lys Lys Arg Ile Leu Ser Pro Asp Thr Met Glu Glu Leu Ala Val Ser
             50             55             60
Lys Ala Ser Ser Pro Pro Val Ser Pro Leu Gly Leu Arg Arg Cys His
65             70             75             80
Leu Cys His Thr Cys Ser Ser Leu Asn Pro Arg Ser Ile Gln Ser Ala
             85             90             95
Thr Trp Trp Glu Ser Phe Arg Thr Ala Ala Asp Gly Thr Arg
             100             105             110

```

<210> 1695

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1695

```

tgatcagctt tatcaggagt ttttgcaagt accgcagatt tatgttgaat cctagtaagc
60
gccaggaatt tgaagactat cttcaccagg aaatgcaaaa tagcaaggaa aatttcacca
120
cagcacacaa cacatcgga cgttcagctc caccctccac aaatgtccgg agtgcagacc
180
aagagaatgg agaaataacc cttgtaaagc gtcgtatatt tggccacagg attatcactg
240
tcaactttgc gatcaatgat ctatatttct tttctgaaat ggagaaattt aatgatctgg
300
tcagttcagc ccacatgctg caggtcaacc gggcatataa tgagaatgat gtgaccta
360
tgcggtccaa aatgaacatt atccaaaaac tcttctgaa ttctgacatc cctccaaagc
420
tgagggtgaa tgtccctgag ttccagaagg atgccatcct tgctgccatc acagagggct
480
accta
485

```

<210> 1696

<211> 148

<212> PRT

<213> Homo sapiens

<400> 1696

```

Met Leu Asn Pro Ser Lys Arg Gln Glu Phe Glu Asp Tyr Leu His Gln
 1             5             10             15
Glu Met Gln Asn Ser Lys Glu Asn Phe Thr Thr Ala His Asn Thr Ser
             20             25             30
Gly Arg Ser Ala Pro Pro Ser Thr Asn Val Arg Ser Ala Asp Gln Glu
             35             40             45
Asn Gly Glu Ile Thr Leu Val Lys Arg Arg Ile Phe Gly His Arg Ile

```

```

      50              55              60
Ile Thr Val Asn Phe Ala Ile Asn Asp Leu Tyr Phe Phe Ser Glu Met
65              70              75              80
Glu Lys Phe Asn Asp Leu Val Ser Ser Ala His Met Leu Gln Val Asn
      85              90              95
Arg Ala Tyr Asn Glu Asn Asp Val Ile Leu Met Arg Ser Lys Met Asn
      100              105              110
Ile Ile Gln Lys Leu Phe Leu Asn Ser Asp Ile Pro Pro Lys Leu Arg
      115              120              125
Val Asn Val Pro Glu Phe Gln Lys Asp Ala Ile Leu Ala Ala Ile Thr
      130              135              140
Glu Gly Tyr Leu
145

```

<210> 1697

<211> 337

<212> DNA

<213> Homo sapiens

<400> 1697

```

accaggttcc caccatcctc aggggaatca caggttactg gctttggaga ccgagatgtc
60
ttcccgcctc ccaggggcct gtggatggga ctccctgcga attcgactcc caggggaaaa
120
gccaaagagct gcctccttgg gacaactggg gcggcagctg tgatgcaca tggcttcagc
180
agaggcctga gcggctgcct ccgttggcca gcaggctctg agagcactcg cccggcctga
240
ctgttcatcc atcctttcac ccggaggcca gctgtggctg tctgtgctct cagaggggag
300
gcgatgggca aggcgcctgc catgcagatg ggtggtg
337

```

<210> 1698

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1698

```

Met Ala Gly Ala Leu Pro Ile Ala Ser Pro Leu Arg Ala Gln Thr Ala
1              5              10              15
Thr Ala Gly Leu Arg Val Lys Gly Trp Met Asn Ser Gln Ala Gly Arg
      20              25              30
Val Leu Ser Glu Pro Ala Gly Gln Arg Arg Gln Pro Leu Arg Pro Leu
      35              40              45
Leu Lys Pro Cys Ala Ile Thr Ala Ala Ala Pro Val Val Pro Arg Arg
      50              55              60
Gln Leu Leu Ala Phe Pro Leu Gly Val Glu Phe Ala Gly Ser Pro Ile
65              70              75              80
His Arg Pro Leu Gly Gly Gly Lys Thr Ser Arg Ser Pro Lys Pro Val
      85              90              95
Thr Cys Asp Ser Pro Glu Asp Gly Gly Asn Leu
      100              105

```

<210> 1699
 <211> 442
 <212> DNA
 <213> Homo sapiens

<400> 1699
 nacgcgttcc ttaaggatca tcctgaggtt ctgtacgtag accttctaata tgcggatatg
 60
 aatgggtgtgg tgcgcggcaa gcgcacgcgaa cgcaccagcc tccacaaggt ttacgagaag
 120
 ggcattaacc tgccctgcctc tctatttgcc ctggatatca atggctcaac ggtggaaagc
 180
 accggcctgg gtctggacat cggtgatgct gaccgaatct gttatccaat ccccgacacc
 240
 ctgtgcaatg aaccctggca aaagcgccca accgcgcaac tgctgatgac catgcacgaa
 300
 cttgaagggg aacctttttt cgccgatcct cgcgaagtac tccgccaagt tgtaagcaaa
 360
 tttgacgacc tcgggtctgac catctgcgcc gcattcgagc tggagttcta cctgattgac
 420
 caggagaacg tgaatggccg gc
 442

<210> 1700
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 1700
 Xaa Ala Phe Leu Lys Asp His Pro Glu Val Leu Tyr Val Asp Leu Leu
 1 5 10 15
 Ile Ala Asp Met Asn Gly Val Val Arg Gly Lys Arg Ile Glu Arg Thr
 20 25 30
 Ser Leu His Lys Val Tyr Glu Lys Gly Ile Asn Leu Pro Ala Ser Leu
 35 40 45
 Phe Ala Leu Asp Ile Asn Gly Ser Thr Val Glu Ser Thr Gly Leu Gly
 50 55 60
 Leu Asp Ile Gly Asp Ala Asp Arg Ile Cys Tyr Pro Ile Pro Asp Thr
 65 70 75 80
 Leu Cys Asn Glu Pro Trp Gln Lys Arg Pro Thr Ala Gln Leu Leu Met
 85 90 95
 Thr Met His Glu Leu Glu Gly Glu Pro Phe Phe Ala Asp Pro Arg Glu
 100 105 110
 Val Leu Arg Gln Val Val Ser Lys Phe Asp Asp Leu Gly Leu Thr Ile
 115 120 125
 Cys Ala Ala Phe Glu Leu Glu Phe Tyr Leu Ile Asp Gln Glu Asn Val
 130 135 140
 Asn Gly Arg
 145

<210> 1701
 <211> 8265
 <212> DNA
 <213> Homo sapiens

<400> 1701
 nacgcgtgaa gggagggcga ggccggagcc cgagggcgac ccgagaagcg gcggggcggc
 60
 gggccggcgg gcggggcgca gagccaggca gcgcaggat agccaggctg gagaaaagaa
 120
 gctgccacca tggttgcaact ttcactgaag atcagcattg ggaatgtggt gaagacgatg
 180
 cagtttgagc cgtctaccat ggtgtacgac gcctgccgca tcattcgtga gcggatccca
 240
 gagggcccag ctggctcctcc cagcgaacttt gggctctttc tgtcagatga tgaccccaaa
 300
 aagggtatat ggctggaggc tgggaaagct ttggactact acatgctccg aaatggggac
 360
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Ser Ala Gln Pro Ala Ser Ala Glu Pro Arg Gln Asn Leu Leu Gln Ala
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Glu Ser Asp Thr Asp Pro His Phe Gln Asp Ala Leu Met Gln Leu Ala
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1351

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His	Lys	Val	Ser	Gln	Met	Ala	Gln	Tyr	Phe	Glu	Pro	Leu	Thr	Leu	Ala				
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Ala	Val	Gly	Ala	Ala	Ser	Lys	Thr	Leu	Ser	His	Pro	Gln	Gln	Met	Ala				
1745										1750					1755				
Leu	Leu	Asp	Gln	Thr	Lys	Thr	Leu	Ala	Glu	Ser	Ala	Leu	Gln	Leu	Leu				
1765										1770					1775				
Tyr	Thr	Ala	Lys	Glu	Ala	Gly	Gly	Asn	Pro	Lys	Gln	Ala	Ala	His	Thr				
1780										1785					1790				
Gln	Glu	Ala	Leu	Glu	Glu	Ala	Val	Gln	Met	Met	Thr	Glu	Ala	Val	Glu				
1795										1800					1805				
Asp	Leu	Thr	Thr	Thr	Leu	Asn	Glu	Ala	Ala	Ser	Ala	Ala	Gly	Val	Val				
1810										1815					1820				
Gly	Gly	Met	Val	Asp	Ser	Ile	Thr	Gln	Ala	Ile	Asn	Gln	Leu	Asp	Glu				
1825										1830					1835				
Gly	Pro	Met	Gly	Glu	Pro	Glu	Gly	Ser	Phe	Val	Asp	Tyr	Gln	Thr	Thr				
1845										1850					1855				
Met	Val	Arg	Thr	Ala	Lys	Ala	Ile	Ala	Val	Thr	Val	Gln	Glu	Met	Val				
1860										1865					1870				
Thr	Lys	Ser	Asn	Thr	Ser	Pro	Glu	Glu	Leu	Gly	Pro	Leu	Ala	Asn	Gln				
1875										1880					1885				
Leu	Thr	Ser	Asp	Tyr	Gly	Arg	Leu	Ala	Ser	Glu	Ala	Lys	Pro	Ala	Ala				
1890										1895					1900				
Val	Ala	Ala	Glu	Asn	Glu	Glu	Ile	Gly	Ser	His	Ile	Lys	His	Arg	Val				
1905										1910					1915				
Gln	Glu	Leu	Gly	His	Gly	Cys	Ala	Ala	Leu	Val	Thr	Lys	Ala	Gly	Ala				
1925										1930					1935				
Leu	Gln	Cys	Ser	Pro	Ser	Asp	Ala	Tyr	Thr	Lys	Lys	Glu	Leu	Ile	Glu				
1940										1945					1950				
Cys	Ala	Arg	Arg	Val	Ser	Glu	Lys	Val	Ser	His	Val	Leu	Ala	Ala	Leu				
1955										1960					1965				
Gln	Ala	Gly	Asn	Arg	Gly	Thr	Gln	Ala	Cys	Ile	Thr	Ala	Ala	Ser	Ala				
1970										1975					1980				
Val	Ser	Gly	Ile	Ile	Ala	Asp	Leu	Asp	Thr	Thr	Ile	Met	Phe	Ala	Thr				
1985										1990					1995				
Ala	Gly	Thr	Leu	Asn	Arg	Glu	Gly	Thr	Glu	Thr	Ser	Ala	Asp	His	Arg				
2005										2010					2015				
Glu	Gly	Ile	Leu	Lys	Thr	Ala	Lys	Val	Leu	Val	Glu	Asp	Thr	Lys	Val				
2020										2025					2030				
Leu	Val	Gln	Asn	Ala	Ala	Gly	Ser	Gln	Glu	Lys	Leu	Ala	Gln	Ala	Ala				

2035	2040	2045
Gln Ser Ser Val Ala Thr	Ile Thr Arg Leu Ala Asp Val Val Lys Leu	
2050	2055	2060
Gly Ala Ala Ser Leu Gly	Ala Glu Asp Pro Glu Thr Gln Val Val Leu	
2065	2070	2075
Ile Asn Ala Val Lys Asp	Val Ala Lys Ala Leu Gly Asp Leu Ile Ser	2080
2085	2090	2095
Ala Thr Lys Ala Ala Ala	Gly Lys Val Gly Asp Asp Pro Ala Val Trp	
2100	2105	2110
Gln Leu Lys Asn Ser Ala	Lys Val Met Val Thr Asn Val Thr Ser Leu	
2115	2120	2125
Leu Lys Thr Val Lys Ala	Val Glu Asp Glu Ala Thr Lys Gly Thr Arg	
2130	2135	2140
Ala Leu Glu Ala Thr Thr	Glu His Ile Arg Gln Glu Leu Ala Val Phe	
2145	2150	2155
Cys Ser Pro Glu Pro Pro	Ala Lys Thr Ser Thr Pro Glu Asp Phe Ile	
2165	2170	2175
Arg Met Thr Lys Gly Ile	Thr Met Ala Thr Ala Lys Ala Val Ala Ala	
2180	2185	2190
Gly Asn Ser Cys Arg Gln	Glu Asp Val Ile Ala Thr Ala Asn Leu Ser	
2195	2200	2205
Arg Arg Ala Ile Ala Asp	Met Leu Arg Ala Cys Lys Glu Ala Ala Tyr	
2210	2215	2220
His Pro Glu Val Ala Pro	Asp Val Arg Leu Arg Ala Leu His Tyr Gly	
2225	2230	2235
Arg Glu Cys Ala Asn Gly	Tyr Leu Glu Leu Leu Asp His Val Leu Leu	
2245	2250	2255
Thr Leu Gln Lys Pro Ser	Pro Glu Leu Lys Gln Gln Leu Thr Gly His	
2260	2265	2270
Ser Lys Arg Val Ala Gly	Ser Val Thr Glu Leu Ile Gln Ala Ala Glu	
2275	2280	2285
Ala Met Lys Gly Thr Glu	Trp Val Asp Pro Glu Asp Pro Thr Val Ile	
2290	2295	2300
Ala Glu Asn Glu Leu Leu	Gly Ala Ala Ala Ala Ile Glu Ala Ala Ala	
2305	2310	2315
Lys Lys Leu Glu Gln Leu	Lys Pro Arg Ala Lys Pro Lys Glu Ala Asp	2320
2325	2330	2335
Glu Ser Leu Asn Phe Glu	Glu Gln Ile Leu Glu Ala Ala Lys Ser Ile	
2340	2345	2350
Ala Ala Ala Thr Ser Ala	Leu Val Lys Ala Ala Ser Ala Ala Gln Arg	
2355	2360	2365
Glu Leu Val Ala Gln Gly	Lys Val Gly Ala Ile Pro Ala Asn Ala Leu	
2370	2375	2380
Asp Asp Gly Gln Trp Ser	Gln Gly Leu Ile Ser Ala Ala Arg Met Val	
2385	2390	2395
Ala Ala Ala Thr Asn Asn	Leu Cys Glu Ala Ala Asn Ala Ala Val Gln	
2405	2410	2415
Gly His Ala Ser Gln Glu	Lys Leu Ile Ser Ser Ala Lys Gln Val Ala	
2420	2425	2430
Ala Ser Thr Ala Gln Leu	Leu Val Ala Cys Lys Val Lys Ala Asp Gln	
2435	2440	2445
Asp Ser Glu Ala Met Lys	Arg Leu Gln Ala Ala Gly Asn Ala Val Lys	
2450	2455	2460
Arg Ala Ser Asp Asn Leu	Val Lys Ala Ala Gln Lys Ala Ala Phe	


```

2465          2470          2475          2480
Glu Glu Gln Glu Asn Glu Thr Val Val Val Lys Glu Lys Met Val Gly
          2485          2490          2495
Gly Ile Ala Gln Ile Ile Ala Ala Gln Glu Glu Met Leu Arg Lys Glu
          2500          2505          2510
Arg Glu Leu Glu Glu Ala Arg Lys Lys Leu Ala Gln Ile Arg Gln Gln
          2515          2520          2525
Gln Tyr Lys Phe Leu Pro Ser Glu Leu Arg Asp Glu His
          2530          2535          2540

```

<210> 1703
 <211> 346
 <212> DNA
 <213> Homo sapiens

```

<400> 1703
ggatcccag gagaaaaatc ctctgttact tcatgggtca tgtgactgag aatcttttta
60
ggaatctgtg atggagaaga atgactcttc ttcttctctg agtcctgtag taatgcattc
120
tctgctctac ccttctccat gactgctgcc tggctctgtcc tagccttgcct ctgatccaca
180
ctgagctggc cttgagcagg gtcgcacctg tacatgaaga caatggctggg tttctcactg
240
gactctcctt tcgcctctgt gaaccagtga tggcgctgaa ctggaggaag aggagcatg
300
tgaatgactg tgccatccat ggccaccaag ttccttttct ctctgct
346

```

<210> 1704.
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 1704
Met Asp Gly Thr Val Ile His Met Leu Pro Leu Pro Pro Val Gln Arg
1          5          10          15
His His Trp Phe Thr Glu Ala Lys Gly Glu Ser Ser Glu Lys Pro Ala
20         25         30
Ile Val Phe Met Tyr Arg Cys Asp Pro Ala Gln Gly Gln Leu Ser Val
35         40         45
Asp Gln Ser Lys Ala Arg Thr Asp Gln Ala Ala Val Met Glu Lys Gly
50         55         60
Arg Ala Glu Asn Ala Leu Leu Gln Asp Ser Glu Lys Lys Arg Ser His
65         70         75         80
Ser Ser Pro Ser Gln Ile Pro Lys Lys Ile Leu Ser His Met Thr His
85         90         95
Glu Val Thr Glu Asp Phe Ser Pro Arg Asp
100        105

```

<210> 1705
 <211> 377
 <212> DNA
 <213> Homo sapiens

<400> 1705

gtgcaccttt tctcaggact cgctcagaag gtccttctgg gaggacaatg gacaagacta
60
aaccatcaaa tccattctca atgggtcaaa ttccaaattt tcttgaaggg ctggcttcta
120
ctgggtgctcc aatcgagttg cagaaaggta tacagggtgg agcaagttta tttaatcctg
180
gttttggctg gaacaaaaat ccacaagttc aaaccttgaa gaattctcaa ggttctattc
240
ataatttagt gaggtctgga gttactgttg aaaggaaagt taatgtaggg gcacaaggag
300
cttttaactc tgccctgca ccacagatgg aatttccac agttcctcca tacaaccctc
360
cttccttcgg agctagc
377

<210> 1706

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1706

Met	Asp	Lys	Thr	Lys	Pro	Ser	Asn	Pro	Phe	Ser	Met	Gly	Gln	Ile	Pro
1				5					10					15	
Asn	Phe	Pro	Glu	Gly	Leu	Ala	Ser	Thr	Gly	Ala	Pro	Ile	Glu	Leu	Gln
			20					25					30		
Lys	Gly	Ile	Gln	Gly	Gly	Ala	Ser	Leu	Phe	Asn	Pro	Gly	Phe	Gly	Trp
			35				40					45			
Asn	Gln	Asn	Pro	Gln	Val	Gln	Thr	Leu	Lys	Asn	Ser	Gln	Gly	Ser	Ile
			50			55					60				
His	Asn	Leu	Val	Arg	Ser	Gly	Val	Thr	Val	Glu	Arg	Lys	Val	Asn	Val
65					70					75				80	
Gly	Ala	Gln	Gly	Ala	Phe	Asn	Ser	Ala	Pro	Ala	Pro	Gln	Met	Glu	Phe
				85					90					95	
Pro	Thr	Val	Pro	Pro	Tyr	Asn	Pro	Ser	Ser	Phe	Gly	Ala	Ser		
			100					105					110		

<210> 1707

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1707

ntttcggtag acccgaagcc cggacgcagc gccgataccc atgtgcgccc agtactacgc
60
catcacgcca agcgagtgt catcatcggg gccgggctag ccggcatgga ggctgcgcga
120
gttctcagcg aacgcgcaca cgaacctctc atcgtcgagg ccagcgacca cattggcgga
180
gtcatccttg cgggtggtea accttccttc aaggaggacg acctagctct gctggagtgg
240
taccgcacca ccttgaggga gttgggcgtg gagattcgac tcaacaccac cgtaacggct
300

gatcttatcg cttccttcgg ggccgatcac gtcgtcctgg cgaccggatc gaggccgcgt
 360
 cgactcgacc taggtgatga tgccaagggtc attgacgcca ccgacgctct gctcaaccgc
 420
 gacgcgt
 427

<210> 1708
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1708
 Xaa Ser Val Asn Pro Lys Pro Gly Arg Ser Ala Asp Thr His Val Arg
 1 5 10 15
 Pro Val Leu Arg His His Ala Lys Arg Val Leu Ile Ile Gly Ala Gly
 20 25 30
 Leu Ala Gly Met Glu Ala Ala Arg Val Leu Ser Glu Arg Ala His Glu
 35 40 45
 Pro Leu Ile Val Glu Ala Ser Asp His Ile Gly Gly Val Ile Leu Ala
 50 55 60
 Gly Gly Gln Pro Ser Phe Lys Glu Asp Asp Leu Ala Leu Leu Glu Trp
 65 70 75 80
 Tyr Arg Thr Thr Leu Glu Glu Leu Gly Val Glu Ile Arg Leu Asn Thr
 85 90 95
 Thr Val Thr Ala Asp Leu Ile Ala Ser Phe Gly Ala Asp His Val Val
 100 105 110
 Leu Ala Thr Gly Ser Arg Pro Arg Arg Leu Asp Leu Gly Asp Asp Ala
 115 120 125
 Lys Val Ile Asp Ala Thr Asp Ala Leu Leu Asn Arg Asp Ala
 130 135 140

<210> 1709
 <211> 446
 <212> DNA
 <213> Homo sapiens

<400> 1709
 acgcgtgaag gggaccagga gggtggacac agaccattgc aatggaaatg atgatttaga
 60
 ctgtttctttt ctgactgatg actgggagtc agggaagatg aatgcagagt ctgtgatcac
 120
 ctctctttcc agccacatca tatctcagcc tcttgaggga aactcccata gcttgtctct
 180
 tcagtcccag ttgacagctt ctgaacgttt ccaagagaat agttcggatc attcagaaac
 240
 caggttggtg caagagggtt tctttcaggc aatcctgctt gctgtgtgct taatcatttc
 300
 tgcattgtgca agatgggtta tgggagaaat attagccagt gtcttcacat gctcattgat
 360
 gataactgta gcttatgtga aatcattggt tctcagcctt gccagctatt tcaaaaccac
 420
 tgcctgtgct cggtttgtca aaattt
 446

<210> 1710
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 1710
 Met Asn Ala Glu Ser Val Ile Thr Ser Ser Ser Ser His Ile Ile Ser
 1 5 10 15
 Gln Pro Pro Gly Gly Asn Ser His Ser Leu Ser Leu Gln Ser Gln Leu
 20 25 30
 Thr Ala Ser Glu Arg Phe Gln Glu Asn Ser Ser Asp His Ser Glu Thr
 35 40 45
 Arg Leu Leu Gln Glu Val Phe Phe Gln Ala Ile Leu Leu Ala Val Cys
 50 55 60
 Leu Ile Ile Ser Ala Cys Ala Arg Trp Val Met Gly Glu Ile Leu Ala
 65 70 75 80
 Ser Val Phe Thr Cys Ser Leu Met Ile Thr Val Ala Tyr Val Lys Ser
 85 90 95
 Leu Phe Leu Ser Leu Ala Ser Tyr Phe Lys Thr Thr Ala Cys Ala Arg
 100 105 110
 Phe Val Lys Ile
 115

<210> 1711
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 1711
 nggggggattc atgttagtat ttgtcagaaa aggcttttga aagagccaaa ttaaaaagag
 60
 cactagaaca tgaacaggga aagcagagga aatacttgta gaaagtattt ttacagctc
 120
 cctcaatata attcagtaat gttcattcct ggtgagaagt ctgtccgcac acacagcatc
 180
 agccaagcag cagaagcagt ggtgtctggg gggctgggaa gtttttcccc caaataccca
 240
 ccccatgcac tgcccagtc ccagacccca aagactttgt cctcgctca cgcacctttt
 300
 gcagggtcac actgtctgtg tgcgcaagag gtagcgacag gagacaatgg ggaaagagct
 360
 gaaggaggca aacaaggcca gggggaaagc ctacctcgag gcacagaggg gccccaagat
 420
 ggatat
 426

<210> 1712
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1712
 Met Asn Arg Glu Ser Arg Gly Asn Thr Cys Arg Lys Tyr Phe Leu Gln

```

      1             5             10             15
Leu Pro Gln Tyr Asn Ser Val Met Phe Ile Pro Gly Glu Lys Ser Val
      20             25             30
Arg Thr His Ser Ile Ser Gln Ala Ala Glu Ala Val Val Ser Gly Gly
      35             40             45
Leu Gly Ser Phe Ser Pro Lys Tyr Pro Pro His Ala Leu Pro Ser Pro
      50             55             60
Gln Thr Pro Lys Thr Leu Ser Ser Pro His Ala Pro Phe Ala Gly Ser
      65             70             75             80
His Cys Leu Cys Ala Gln Glu Val Ala Thr Gly Asp Asn Gly Glu Arg
      85             90             95
Ala Glu Gly Gly Lys Gln Gly Gln Gly Glu Ser Leu Pro Arg Gly Thr
      100             105             110
Glu Gly Pro Gln Asp Gly Tyr
      115

```

<210> 1713
 <211> 328
 <212> DNA
 <213> Homo sapiens

```

<400> 1713
tctagaaagg tttatttcat gggccaaggc ttgtgtttcc aaagccagga agggctgaag
60
ccagaattgg ccctggctgc ttgccacaga gtctggccgg gggaccctgg acctcagcag
120
ggtcattgatg aggtcagctt tggaggagca gggccagcgt gtctgtcttt ctgtccttgg
180
aatgagcctc actccctccc tgctcaaggc agcccttcac ccagccgccc ggacaggtgc
240
cctgtgccac ctgccatccc tgggattctc catctcagtg agtgctccct ggggcctggg
300
aacgcattctg gctgggtgact cctggggg
328

```

<210> 1714
 <211> 99
 <212> PRT
 <213> Homo sapiens

```

<400> 1714
Met Gly Gln Gly Leu Cys Phe Gln Ser Gln Glu Gly Leu Lys Pro Glu
1             5             10             15
Leu Ala Leu Ala Ala Cys His Arg Val Trp Pro Gly Asp Pro Gly Pro
      20             25             30
Gln Gln Gly His Asp Glu Val Ser Phe Gly Gly Ala Gly Pro Ala Cys
      35             40             45
Pro Ala Phe Cys Ser Trp Asn Glu Pro His Ser Leu Pro Ala Gln Gly
      50             55             60
Ser Pro Ser Pro Ser Arg Arg Asp Arg Cys Pro Val Pro Pro Ala Ile
      65             70             75             80
Pro Gly Ile Leu His Leu Ser Glu Cys Ser Leu Gly Pro Gly Asn Ala
      85             90             95
Ser Gly Trp

```

<210> 1715
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 1715
 gttgccagcg atgggcccga tttgtacatc ccggtatttc gtgttcggtg tgggtgtaaaa
 60
 gatgccccat gtgtgacatt ctgtggatag ttattgtag cattatttga caagttctag
 120
 aaatcgatcc acccaggcgt gtagctgcgg tatttcatca gagttgatcg ttgcgatgag
 180
 ttgatcatgg cctgtcatgg cgtagtcttc tacgtcgtaa agtatgagac aatccacggt
 240
 aatatggtgt tttttggcca actcggaagc cgggggtgtcg gggaagtcgg tccctgtaag
 300
 gtatgggcct gtcccaatga cgacgtgtgc tgggtccatg aggagtctcg ccaagggtcg
 360
 aactcattac cgtcgaatac gacgctgtcg ccatcggcgg tgcgaatcg aatcctcaaa
 420
 gtgtatccgt actcggtgtc gcgcaacagg tgcctaacct cagcgctagt gggctgtgca
 480
 ctgacgcgt
 489

<210> 1716
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1716
 Met Ala Cys His Gly Val Val Phe Tyr Val Val Lys Tyr Glu Thr Ile
 1 5 10 15
 His Gly Asn Met Val Phe Phe Gly Gln Leu Gly Ser Arg Gly Val Gly
 20 25 30
 Glu Val Gly Pro Cys Lys Val Trp Ala Cys Pro Asn Asp Asp Val Cys
 35 40 45
 Trp Val His Glu Glu Phe Val Gln Gly Ser Asn Ser Leu Pro Ser Asn
 50 55 60
 Thr Thr Leu Ser Pro Ser Ala Val Ser Asn Arg Ile Leu Lys Val Tyr
 65 70 75 80
 Pro Tyr Ser Val Ser Arg Asn Arg Cys Leu Thr Ser Ala Leu Val Gly
 85 90 95
 Cys Ala Leu Thr Arg
 100

<210> 1717
 <211> 312
 <212> DNA
 <213> Homo sapiens

<400> 1717

```
<210> 1718
<211> 101
<212> PRT
<213> Homo sapiens
```

```
<210> 1719
<211> 404
<212> DNA
<213> Homo sapiens
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1361

<210> 1720
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 1720
 Met Gly Ala Pro Cys Ser Asn Pro Gly Asp Thr Asp Ser Pro Phe Met
 1 5 10 15
 Trp Cys Ala Ala Thr Ser Met Ala Leu Leu Gly Arg Asp Asp Phe Gln
 20 25 30
 Leu Asn Asp Thr Pro Gln Pro Val Thr Arg Ser Ile Thr Glu Thr Lys
 35 40 45
 Thr Lys Asn Trp Ser Val Ser Ala Gly Ile Asp Phe Pro Leu Leu Asp
 50 55 60
 Val Ile His Ile Ser Ile Ser Ser Ser Tyr Ser Thr Ser Ser Thr Tyr
 65 70 75 80
 Glu Val Gly Glu Thr Val Gly Pro Tyr Asp Val Ala Pro Gly Lys Thr
 85 90 95
 Ala Val Leu Gln Ala Gly Trp Ile Val Ser Asp Phe Glu Gly Gln His
 100 105 110
 Thr Val Cys Gly Pro Asp Lys Lys Trp Gln Gly Arg Gly Asp
 115 120 125

<210> 1721
 <211> 529
 <212> DNA
 <213> Homo sapiens

<400> 1721
 ccatggccac cctttcagga cagagctgcc cttcccatgc tggaggagcc acagggcctg
 60
 gtcgctgtgg cttcagcctc ccagctcctc ctgtcctctg ctgggcactt gtaatgtcca
 120
 ggcactccct gcttgatca ggggatctgg gtttcatctt ccagctcct cctgtcctct
 180
 gctgggcacc tgtgatgtcc aggcactccc tgcttgatt ggggatctg ggtttcatct
 240
 tccagctcc tctgtcctc cgctgggcac ctgtgatgtc caggcactcc ctgcttggat
 300
 cgggggggtct gggttttgtg ctatacttgg tgcctccttt cactcaggcc ctttcttgac
 360
 tctgcagagc taccctcgc catctctttc acgcgggcct cctgcagtct ctgtgctcac
 420
 cctgtgactc tgcttcgggt gttgtcaaat gggggtcac ccaggaccg caccactggg
 480
 tcgtgtgcag gtttctgggg tggcagagtg cggatgagtg ggcacgcgt
 529

<210> 1722
 <211> 118
 <212> PRT
 <213> Homo sapiens

<400> 1722

```

Met Ala Thr Leu Ser Gly Gln Ser Cys Pro Ser His Ala Gly Gly Ala
 1           5           10           15
Thr Gly Pro Gly Arg Cys Gly Phe Ser Leu Pro Ala Pro Pro Val Leu
          20           25           30
Cys Trp Ala Leu Val Met Ser Arg His Ser Leu Leu Gly Ser Gly Asp
          35           40           45
Leu Gly Phe Ile Phe Pro Ala Pro Pro Val Leu Cys Trp Ala Pro Val
          50           55           60
Met Ser Arg His Ser Leu Leu Gly Leu Gly Asp Leu Gly Phe Ile Phe
65           70           75           80
Pro Ala Pro Pro Val Leu Arg Trp Ala Pro Val Met Ser Arg His Ser
          85           90           95
Leu Leu Gly Ser Gly Gly Leu Gly Phe Val Leu Tyr Leu Val Leu Pro
          100          105          110
Phe Thr Gln Ala Pro Ser
          115

```

<210> 1723

<211> 371

<212> DNA

<213> Homo sapiens

<400> 1723

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acgcgtttga agctggatgc atggatatcc agcgccgccca tcgggtcaaa tgggttgacg
60
ctgcccttga tggtcaccgg ggcgtagcga tctaccttac cgttgatgtc gacgctcgcc
120
ggtttggcct ggcggtgtgc aatggtgccca atcttcccgt tgagttgttg aatggcagtg
180
gcaaagttag gcgtgaggct gaagtcggcg aagttggccg agccatcatt gatcgcaacc
240
tgcccaatgt gaatgcccag tggcttctct ttgctggccg ccggtgtgtc tgttgccagt
300
gtcggccggg tgcgggatca gcaagtcacg gatgttggtg gggcggtcat cggtgatcgc
360
tgcattcaat a
371

```

<210> 1724

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1724

```

Met Asp Ile Gln Arg Arg His Arg Val Lys Trp Val Asp Ala Ala Leu
 1           5           10           15
Asp Gly His Arg Gly Val Ala Ile Tyr Leu Thr Val Asp Val Asp Ala
          20           25           30
Arg Arg Phe Gly Leu Ala Ala Val Asn Gly Ala Asn Leu Pro Val Glu
          35           40           45
Leu Leu Asn Gly Ser Gly Lys Val Gly Arg Glu Ala Glu Val Gly Glu
          50           55           60
Val Gly Arg Ala Ile Ile Asp Arg Asn Leu Pro Asn Val Asn Ala Gln

```

65		70		75		80									
Trp	Leu	Leu	Phe	Ala	Gly	Arg	Arg	Leu	Ser	Cys	Cys	Gln	Cys	Arg	Pro
			85					90						95	
Gly	Ala	Gly	Ser	Ala	Ser	His	Arg	Cys	Trp	Trp	Gly	Gly	His	Arg	
			100					105					110		

<210> 1725

<211> 807

<212> DNA

<213> Homo sapiens

<400> 1725

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ngtgcacctg gtatggtgcc ctctgggtct aagcctgtcc ttgtacacac tcacactttg
60
atttgaagtg acctcttccc tctgagcctt ctgggtgtcca actctccccct tctctaggac
120
catgcagtgc tggaggccga gaggcagaag atgtcagccc ttgtgcgagg gctgcagagg
180
gagctggagg agacttcaga ggagacaggg cattggcaga gtatgttcca gaagaacaag
240
gaggatctta gagccaccaa gcaggaactc ctgcagctgc gaatggagaa ggaggagatg
300
gaagaggagc ttggagagaa gatagaggtc ttgcagaggg aattagagca ggcccagact
360
agtgtctggag atactcgcca ggttgagggtg ctcaagaagg agctgtctcg gacacaggag
420
gagcttaagg aactgcaggc agaacggcag agccaggagg tggctgggcg acaccgggac
480
cgggagttgg agaagcagct ggcggtcctg agggtcgagg ctgatcgagg tcgggagctg
540
gaagaacaga acctccagct acaaaagacc ctccagcaat tgcgacagga ctgtgaagag
600
gcttccaagg ctaagatggt ggccgaggca gaggcaacag tgctggggca gcggcgggcc
660
gcagtggaga cgacgcttcg ggagaccag gaggaatatg acgaattccg ccggcgcctc
720
ctgggttttg agcagcagct gaaggagact cgaggctctg tggatggtgg ggaagcggtg
780
gaggcacgac tacgggacaa gctgcag
807

```

<210> 1726

<211> 230

<212> PRT

<213> Homo sapiens

<400> 1726

Asp	His	Ala	Val	Leu	Glu	Ala	Glu	Arg	Gln	Lys	Met	Ser	Ala	Leu	Val
1				5					10					15	
Arg	Gly	Leu	Gln	Arg	Glu	Leu	Glu	Glu	Thr	Ser	Glu	Glu	Thr	Gly	His
			20					25					30		
Trp	Gln	Ser	Met	Phe	Gln	Lys	Asn	Lys	Glu	Asp	Leu	Arg	Ala	Thr	Lys
		35					40				45				
Gln	Glu	Leu	Leu	Gln	Leu	Arg	Met	Glu	Lys	Glu	Glu	Met	Glu	Glu	Glu

50	55	60
Leu Gly Glu Lys Ile Glu Val Leu Gln Arg Glu Leu Glu Gln Ala Arg		
65	70	75
Ala Ser Ala Gly Asp Thr Arg Gln Val Glu Val Leu Lys Lys Glu Leu		80
	85	90
Leu Arg Thr Gln Glu Glu Leu Lys Glu Leu Gln Ala Glu Arg Gln Ser		95
	100	105
Gln Glu Val Ala Gly Arg His Arg Asp Arg Glu Leu Glu Lys Gln Leu		110
	115	120
Ala Val Leu Arg Val Glu Ala Asp Arg Gly Arg Glu Leu Glu Glu Gln		125
	130	135
Asn Leu Gln Leu Gln Lys Thr Leu Gln Gln Leu Arg Gln Asp Cys Glu		140
145	150	155
Glu Ala Ser Lys Ala Lys Met Val Ala Glu Ala Glu Ala Thr Val Leu		160
	165	170
Gly Gln Arg Arg Ala Ala Val Glu Thr Thr Leu Arg Glu Thr Gln Glu		175
	180	185
Glu Asn Asp Glu Phe Arg Arg Arg Ile Leu Gly Leu Glu Gln Gln Leu		190
	195	200
Lys Glu Thr Arg Gly Leu Val Asp Gly Gly Glu Ala Val Glu Ala Arg		205
	210	215
Leu Arg Asp Lys Leu Gln		220
225	230	

<210> 1727

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1727

```

aaccaactct ccacaacatc gccagaaaca gtcgctgccca agaggtccca ccatgtttta
60
gcagcttcag aagacaaaga taagatgaaa aaggaagttt tacaaagctc aaggacatt
120
atgcaatcca aatcagcttg cgaaattaaa caaagtcacc aagaatgtag tacccaacaa
180
acacaacaga agaagtatct ggagcagttg cacttgcccc aaagcaaacc aatttcccca
240
aatttcaaag ttaaaacat caaacttcca actctagatc atacattaaa tgaaacagac
300
cacagctatg aaagtcataa acagcaatct gagattgatg ttcaaaccctt taccaaaaaa
360
caatatctga aaaccaagaa aactgaagca agcactgaat gtagtcataa gcaatctctg
420
gctgaaagac attatcagtt acctaagaag gagaaaagag tgacagtaca attg
474

```

<210> 1728

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1728

Met Lys Lys Glu Val Leu Gln Ser Ser Arg Asp Ile Met Gln Ser Lys

```

      1             5             10             15
Ser Ala Cys Glu Ile Lys Gln Ser His Gln Glu Cys Ser Thr Gln Gln
      20             25             30
Thr Gln Gln Lys Lys Tyr Leu Glu Gln Leu His Leu Pro Gln Ser Lys
      35             40             45
Pro Ile Ser Pro Asn Phe Lys Val Lys Thr Ile Lys Leu Pro Thr Leu
      50             55             60
Asp His Thr Leu Asn Glu Thr Asp His Ser Tyr Glu Ser His Lys Gln
      65             70             75             80
Gln Ser Glu Ile Asp Val Gln Thr Phe Thr Lys Lys Gln Tyr Leu Lys
      85             90             95
Thr Lys Lys Thr Glu Ala Ser Thr Glu Cys Ser His Lys Gln Ser Leu
      100            105            110
Ala Glu Arg His Tyr Gln Leu Pro Lys Lys Glu Lys Arg Val Thr Val
      115            120            125
Gln Leu
      130

```

<210> 1729

<211> 470

<212> DNA

<213> Homo sapiens

<400> 1729

```

acgcgtgact cgccataaca ttgctgacac gttttccacg gcaagggagg catcatgacg
60
aggatcgacg tgtggtgtg gtcggtgcgc gtctataagt cccggtcggt ggctaccgcc
120
gccgtcaagg gcggccacat tcgcctcaat ggagaccggt ttaaaccctc ccacgacgtg
180
aaaccggcg ataccgtcac catccacacc cccggatggg accgggtcct caaggtcatc
240
aaccgatca cgaaaagagt cggcgccaaa ctgcggtcg aggettacga agatctgtca
300
nngcccccg acccgctac ctctctgnct cccctcgccc gccgcgaccg tggggctgga
360
cgaccacca agaaggatcg tcgcgagatc gatcggtcc gaggcggga ctctcgctat
420
tgaggactct tcgcccggcc caacacacca cggctcgcg ccgaattggc
470

```

<210> 1730

<211> 131

<212> PRT

<213> Homo sapiens

<400> 1730

```

His Val Phe His Gly Lys Gly Gly Ile Met Thr Arg Ile Asp Val Trp
      1             5             10             15
Leu Trp Ser Val Arg Val Tyr Lys Ser Arg Ser Leu Ala Thr Ala Ala
      20             25             30
Val Lys Gly Gly His Ile Arg Leu Asn Gly Asp Pro Val Lys Pro Ser
      35             40             45
His Asp Val Lys Pro Gly Asp Thr Val Thr Ile His Thr Pro Gly Trp

```

```

      50              55              60
Asp Arg Val Leu Lys Val Ile Asn Pro Ile Thr Lys Arg Val Gly Ala
65              70              75              80
Lys Leu Ala Val Glu Ala Tyr Glu Asp Leu Ser Xaa Pro Pro Asp Pro
      85              90              95
Pro Thr Ser Leu Xaa Pro Leu Ala Arg Arg Asp Arg Gly Ala Gly Arg
      100             105             110
Pro Thr Lys Lys Asp Arg Arg Glu Ile Asp Arg Leu Arg Gly Arg Asp
      115             120             125
Ser Arg Tyr
      130

```

<210> 1731

<211> 534

<212> DNA

<213> Homo sapiens

<400> 1731

```

agcgctccct gcctgctgct gggcgaggagg aaggcgggcaa gagctgcgga gccctggaa
60
gagcttccag gaaccctgcg ctgtgggata aaggaatgag gttcagaaag gggcagggag
120
ttgcccgcag ccgcaccgca cgtcttcagc ccgaccgttg tctgacctc tctgtcccg
180
cccctgccca gtctcaccat ggctttcttg acacagctga tgctgctgct ctggaagaat
240
ttcatgtatc gccggagaca gccgggtccag ctcttggtcg aattgctgtg gcctctcttc
300
ctctttcttca tcttggtggc tggttcgccac tcccaccgc ccctggagca ccatgaatgc
360
cacttcccaa acaagccact gccatcggcg ggcaccgtgc cctggctcca ggggtctcatc
420
tgtaatgtga acaacacctg ctttccgcag ctgacaccgg gcgaggagcc cgggcgctg
480
agcaacttca acgactccct ggtctcccg ctgctacgtc ggagagaggc tgga
534

```

<210> 1732

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1732

```

Met Ala Phe Trp Thr Gln Leu Met Leu Leu Leu Trp Lys Asn Phe Met
1              5              10              15
Tyr Arg Arg Arg Gln Pro Val Gln Leu Leu Val Glu Leu Leu Trp Pro
      20              25              30
Leu Phe Leu Phe Phe Ile Leu Val Ala Val Arg His Ser His Pro Pro
      35              40              45
Leu Glu His His Glu Cys His Phe Pro Asn Lys Pro Leu Pro Ser Ala
      50              55              60
Gly Thr Val Pro Trp Leu Gln Gly Leu Ile Cys Asn Val Asn Asn Thr
65              70              75              80
Cys Phe Pro Gln Leu Thr Pro Gly Glu Glu Pro Gly Arg Leu Ser Asn

```

85 90 95
 Phe Asn Asp Ser Leu Val Ser Arg Leu Leu Arg Arg Arg Glu Ala Gly
 100 105 110

<210> 1733
 <211> 409
 <212> DNA
 <213> Homo sapiens

<400> 1733
 acgcgtgatg gccgatccga ctgtgcccgg tcacgaccgg cggcgtccga gtcttgaccc
 60
 ggacatgccg tggctgatcc gcgacatcac cctcggcaac aacgtgatcg cgggcagcac
 120
 gggcaactgc accctctgcg tcgaggacta ctgcgcgagg tacgcggcga ggatcctcaa
 180
 catcgtctcc gacggcaacg tcctgcagcg cgcacatggcc gcacagccag cgtggctggg
 240
 tgggtgtggtc gcgggggatca gcgaactccg atccgtacgt attctccagc ctgcacgctt
 300
 accgggagac cactgggttt taggaccttc gctcgggtctc gatcgatggc gtgctgtcac
 360
 cgcggccgga gcgctgctcc cgggcattga tctcaaggcg gtcacgagg
 409

<210> 1734
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 1734
 Met Ala Asp Pro Thr Val Pro Gly His Asp Pro Arg Arg Pro Ser Pro
 1 5 10 15
 Asp Pro Asp Met Pro Trp Leu Ile Arg Asp Ile Thr Leu Gly Asn Asn
 20 25 30
 Val Ile Ala Gly Ser Thr Gly Asn Cys Thr Leu Cys Val Glu Asp Tyr
 35 40 45
 Ser Arg Arg Tyr Ala Ala Arg Ile Leu Asn Ile Val Ser Asp Gly Asn
 50 55 60
 Val Leu Gln Arg Ala Ser Ala Ala Gln Pro Ala Trp Leu Val Gly Val
 65 70 75 80
 Val Ala Gly Ile Ser Glu Leu Arg Ser Val Arg Ile Leu Gln Pro Arg
 85 90 95
 Arg Leu Pro Gly Asp His Trp Phe Leu Gly Pro Ser Leu Gly Leu Asp
 100 105 110
 Arg Trp Arg Ala Val Thr Ala Ala Gly Ala Leu Leu Pro Gly Ile Asp
 115 120 125
 Leu Lys Ala Val Thr Arg
 130

<210> 1735
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 1735

ggcgccatgg tcatcagcat catgtgttcg gcgcccgtg cacgaatgtt cgtgcgatca
60
agcgcgccctt ttagttcgac gcacggtaaa gcccgtgcgc atcgatgtag gccaggaccg
120
cgtcaggcac caggaaacgt accgacttcc cgctggccgg cagttgacgg atctgggtgg
180
cggacaccgc aagcggggtc tgccagacga atgcaatatt cccgttcggc ccggtcaggg
240
ccaaggggtc acttaccgac cgcgcggcca gcaggttgcg caaggcatcc ggcggttcgc
300
tggcggcatc cgggcgttgc aaaaccagga tgtggcaatg ct
342

<210> 1736

<211> 112

<212> PRT

<213> Homo sapiens

<400> 1736

Met	Val	Ile	Ser	Ile	Met	Cys	Ser	Ala	Pro	Ala	Ala	Arg	Met	Phe	Val
1				5					10					15	
Arg	Ser	Ser	Ala	Pro	Phe	Ser	Ser	Thr	His	Gly	Lys	Ala	Arg	Ala	His
			20					25				30			
Arg	Cys	Arg	Pro	Gly	Pro	Arg	Gln	Ala	Pro	Gly	Asn	Val	Pro	Thr	Ser
		35				40					45				
Arg	Trp	Pro	Ala	Val	Asp	Gly	Ser	Gly	Trp	Arg	Thr	Pro	Gln	Ala	Gly
	50				55					60					
Ser	Ala	Arg	Arg	Met	Gln	Tyr	Ser	Arg	Ser	Ala	Arg	Ser	Gly	Pro	Arg
65				70					75				80		
Gly	His	Leu	Pro	Thr	Ala	Arg	Pro	Ala	Gly	Cys	Ala	Arg	His	Pro	Ala
			85					90					95		
Val	Arg	Trp	Arg	His	Pro	Gly	Val	Ala	Lys	Pro	Gly	Cys	Gly	Asn	Ala
			100					105					110		

<210> 1737

<211> 506

<212> DNA

<213> Homo sapiens

<400> 1737

acgcgtgttc accatgacct ggaccgcca gcggcccgac gggtcgagcg cggaggagtc
60
ggacgagacg actgtggtgg tccttgccat ctcagcgccc cacgggtacg acgtgcaggc
120
gtccggcgcc cacgtcacct cccacccagg cgaccgggtg gcgcgggttc acctcaacca
180
aggcagtacc acggcgaagg tcacgatcac cctgcgctaa cccttcaagc gtcttcagca
240
ccgacctata agtctcccag acacttttac gaccggccct ccccttggg gtgggccccg
300
tccttttctg gtctgtggat gcacctggca gcaccacctc cggcccccat ggagaacagt
360

aggtatcctc gcaggggtact acggccaagg catatttgac gttccacgct tgccactgcc
 420
 gtcttagggc catactgccg ccacgcagct gagacgggtga ccaatcgggt aaggtgactg
 480
 gttgccgtag tccatgcgag gccggc
 506

<210> 1738

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1738

Met	Ala	Leu	Arg	Arg	Gln	Trp	Gln	Ala	Trp	Asn	Val	Lys	Tyr	Ala	Leu
1				5				10						15	
Ala	Val	Val	Pro	Cys	Glu	Asp	Thr	Tyr	Cys	Ser	Pro	Trp	Gly	Pro	Glu
			20				25						30		
Val	Val	Leu	Pro	Gly	Ala	Ser	His	Asp	Thr	Lys	Arg	Thr	Gly	Pro	Thr
		35				40					45				
Pro	Arg	Gly	Arg	Ala	Gly	Arg	Lys	Ser	Val	Trp	Glu	Thr	Tyr	Arg	Ser
	50				55					60					
Val	Leu	Lys	Thr	Leu	Glu	Gly	Leu	Ala	Gln	Gly	Asp	Arg	Asp	Leu	Arg
65				70					75					80	
Arg	Gly	Thr	Ala	Leu	Val	Glu	Val	Gln	Pro	Arg	His	Pro	Val	Ala	Trp
			85					90					95		
Val	Gly	Gly	Asp	Val	Gly	Ala	Gly	Arg	Leu	His	Val	Val	Pro	Val	Gly
			100					105					110		

Arg

<210> 1739

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1739

cgcggtattg aaaatgctgc tttttttact aaattaggac agcgtttaat cggcgcatta
 60
 catcaagtga cggttgatgg atttgtttac cgtgttgata tgcggttacg cccttttggg
 120
 gagtctgggc cattgggttag cacgtttaat tcaatagagg actattatca aacctatggg
 180
 cgagagtggg agtggttatgc catgggttaaa gcccggtgta ttggtgttga ggacgagtat
 240
 aaacaagcgt tagaaaggat gttaaggcct ttcgtattta gacgttacat tgatttttagc
 300
 gctattgatt ctttgcgaaa aatgaaaacg atgatcagtg ctgaagttcg tcgcaagggg
 360
 ttaaaagaca atattaagtt gggaatggga gggatccgtg aaattgaatt tgtggctcaa
 420

<210> 1740

<211> 140

<212> PRT

<213> Homo sapiens

<400> 1740

```

Arg Val Ile Glu Asn Ala Ala Phe Phe Thr Lys Leu Gly Gln Arg Leu
 1             5             10             15
Ile Gly Ala Leu His Gln Val Thr Val Asp Gly Phe Val Tyr Arg Val
      20             25             30
Asp Met Arg Leu Arg Pro Phe Gly Glu Ser Gly Pro Leu Val Ser Thr
      35             40             45
Phe Asn Ser Ile Glu Asp Tyr Tyr Gln Thr His Gly Arg Glu Trp Glu
      50             55             60
Cys Tyr Ala Met Val Lys Ala Arg Val Ile Gly Val Glu Asp Glu Tyr
65             70             75             80
Lys Gln Ala Leu Glu Arg Met Leu Arg Pro Phe Val Phe Arg Arg Tyr
      85             90             95
Ile Asp Phe Ser Ala Ile Asp Ser Leu Arg Lys Met Lys Thr Met Ile
      100            105            110
Ser Ala Glu Val Arg Arg Lys Gly Leu Lys Asp Asn Ile Lys Leu Gly
      115            120            125
Met Gly Gly Ile Arg Glu Ile Glu Phe Val Ala Gln
      130            135            140

```

<210> 1741

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1741

```

nnacgcgctcg aggtgattca ggccgacgcc actgaccgcg tggtccttca cagtctcaat
60
gggcaggtcg acgtcgtcgt ctccaacccg ccctacgtgc cagccggcgc cgtggaggac
120
accgagacgg cccagcacga gcccacggtg gcgctctatg gcggggggccc ggacgggtga
180
gagattccga ttgacgtcct gngtgcgctc agtcgcgctg ctgccaccgg cggagtgtc
240
gtcatggagc acgaccacga gcagggggcg ctgctgccgg cggccgcttc gtgagccggg
300
ttcaagcagg ccgagaccgg tcaggacctc accggccgcg accgctacct gcgcgcggtg
360
cgtaaaccct gctggtag
378

```

<210> 1742

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1742

```

Xaa Arg Val Glu Val Ile Gln Ala Asp Ala Thr Asp Pro Leu Val Leu
 1             5             10             15
His Ser Leu Asn Gly Gln Val Asp Val Val Val Ser Asn Pro Pro Tyr
      20             25             30
Val Pro Ala Gly Ala Val Glu Asp Thr Glu Thr Ala Gln His Glu Pro

```

35 40
Thr Val Ala Leu Tyr Gly Gly Gly Pro Asp Gly
50 55

```
<210> 1743
<211> 4121
<212> DNA
<213> Homo sapiens
```

```

<400> 1743
atcacgtaca actgcaagga ggagttccag atccatgatg agctgctcaa ggctcattac
60
acgttggggc ggctctcgga caacacccct gagcactacc tgggtgcaagg ccgctacttc
120
ctggtgcggg atgtcactga gaagatggat gtgctgggca ccgtgggaag ctgtggggcc
180
cccaacttcc ggcaggtgca ggggtgggctc actgtgttcg gcatgggaca gcccagcctc
240
tcaggggttca ggcgggtcct ccagaaactc cagaaggacg gacataggga gtgtgtcatc
300
ttctgtgtgc gggaggaacc tgtgtcttttc ctgcgtgcag atgaggactt tgtgtcctac
360
acacctcgag acaagcagaa ccttcatgag aacctccagg gccttggacc cggggtcggg
420
gtggagagcc tggagctggc catccgaaa gagatccacg actttgccc a gctgagcgag
480
aacacatacc atgtgtacca taacaccgag gacctgtggg gggagcccca tgctgtggcc
540
atccatggtg aggacgactt gcatgtgacg gaggaggtgt acaagcggcc cctcttcctg
600
cagcccaoct acaggtacca ccgcctgcc ctgcccgagc aaggggagtcc cctggaggcc
660
cagttggacg cctttgtcag tgttctccgg gagaccccca gcctgtgtga gctccgtgat
720
gccacgggc ctccccagc cctcgtcttc agctgccaga tgggcgtggg caggaccaac
780
ctgggcatgg tcctgggcac cctcatcctg cttcacccga gtgggaccac ctcccagcca
840
gaggctgcc ccacgcaggc caagcccctg cctatggagc agttccaggt gatccagagc
900
tttctccga tggtgcccca ggggaaggagg atggtggaag aggtggacag agccatcact
960
gcctgtgcc agttgcatga cctgaaagaa gtggtcttgg aaaaccagaa gaagttagaa
1020
ggtatccgac cggagagccc agcccaggga agcggcagcc gacacagcgt ctggcagagg
1080
gcgctgtgga gcctggagcg atacttctac ctgatcctgt ttaactacta ccttcatgag
1140
cagtaccgc tggcctttgc cctcagtttc agccgctggc tgtgtgccc cctgagctg
1200
taccgcctgc ccgtgacgct gagctcagca ggccctgtgg ctccgaggga cctcatcgcc
1260
aggggctccc tacgggagga cgatctggtc tccccggacg cgctcagcac tgtcagagag
1320

```

atggatgtgg ccaacttccg gcgggtgccc cgcattgccc tctacggcac ggcccagccc
1380
agcgccaagg ccctggggag catcctggcc tacctgacgg acgccaagag gaggtgacgg
1440
aagggtgtct ggggtgagcct tcgggaggag gccgtgttgg agtgtgacgg gcacacctac
1500
agcctgcggg ggccctgggccc ccctgtgggt cctgaccagc tggagaccct ggaggcccag
1560
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1620
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1680
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1740
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1800
tgcctcagcg gccagggccg taccacaact gcgatgggtg tggctgtcct ggccttctgg
1860
cacatccaag gcttccccga ggtgggtgag gaggagctcg tgagtgtgcc tgatgccaa
1920
ttcactaagg gtgaatttca ggtagtaatg aagggtgtgc agctgctacc cgatgggcac
1980
cgtgtgaaga aggaggtgga cgcagcgtg gacactgtca gcgagaccat gacgcccag
2040
cactaccacc tgcgggagat catcatctgc acctaccgcc aggcgaaggc agcgaaagag
2100
gcgcaggaaa tgcggagggt gcagctgcgg agcctgcagt acttgagcgc ctatgtctgc
2160
ctgattctct tcaacgcgta cctccacctg gagaaggccg actcctggca gaggcccttc
2220
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2280
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2340
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2400
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2520
gagcggagtt gggagccttt ttagaaagaa ctttttatag gacagggaga cagcacagcc
2580
atcccttgca aaccaccaag gtgtgtggct gacctccagg gaggagcact cactggagtg
2640
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2700
ggctcactcc ccagttgcc aaacactgtg gatctctctg tcctcttctc ccctctctca
2760
gattggcctg gcagcccctg gcacagagca gacctgcca ctggtagctc ccacttcc
2820
tactcctgct gctctgccat tgcgctccc cttcttgctg cccaagcact gcctcgggc
2880
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2940

gcagcttcac ccagttttct ggactctcat gcccccatct ccgacctggg agacttcagg
 3000
 aatgacaacc taccagcct ggtggggctg gcaggatggg ggaggtttct caaggagctg
 3060
 gagacttcag ggagccctc tcatggggag gaaagagctt ccagggggcg aacgcagcac
 3120
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 3180
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 3240
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 3300
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 3360
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 3420
 gccagaccct gctgagttag aggctgctgg gatccactgt ttccacacag cgggaaggct
 3480
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 3540
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 3600
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 3660
 aaaaaaagga tgtgtcattg gtcattgatat ttgaaaaggg gaggaggccg aagttgttcc
 3720
 catttatcca gtattggaaa atatttgacc cccttggtg aattcttttg cagaactact
 3780
 gtgtgtctgt tcaactacct ttcaggttta ttgtttttat ttttgcagta attaagacgt
 3840
 tttaatttct ttgcagacaa ggtctagatg cggagtcaga gatgggactg aatggggagg
 3900
 gatcctttgt gttctcatgg ttggctctga ctttcagctg tgttgggacc actggctgat
 3960
 cacatcacct ctctgectca gtttcccat ctgtaaaatg ggagaataat acttgccctac
 4020
 ctacctcaca ggggtgttgt gaggattcat ttgtgatttt tttttttttt tttgtacaga
 4080
 gctttttaagc attaaaaaca gctaaatgtg aaaaaaaaaa a
 4121

<210> 1744

<211> 796

<212> PRT

<213> Homo sapiens

<400> 1744

Ile	Thr	Tyr	Asn	Cys	Lys	Glu	Glu	Phe	Gln	Ile	His	Asp	Glu	Leu	Leu
1				5					10					15	
Lys	Ala	His	Tyr	Thr	Leu	Gly	Arg	Leu	Ser	Asp	Asn	Thr	Pro	Glu	His
			20					25					30		
Tyr	Leu	Val	Gln	Gly	Arg	Tyr	Phe	Leu	Val	Arg	Asp	Val	Thr	Glu	Lys
		35					40					45			
Met	Asp	Val	Leu	Gly	Thr	Val	Gly	Ser	Cys	Gly	Ala	Pro	Asn	Phe	Arg

50					55					60					
Gln	Val	Gln	Gly	Gly	Leu	Thr	Val	Phe	Gly	Met	Gly	Gln	Pro	Ser	Leu
65					70					75					80
Ser	Gly	Phe	Arg	Arg	Val	Leu	Gln	Lys	Leu	Gln	Lys	Asp	Gly	His	Arg
				85						90				95	
Glu	Cys	Val	Ile	Phe	Cys	Val	Arg	Glu	Glu	Pro	Val	Leu	Phe	Leu	Arg
			100					105					110		
Ala	Asp	Glu	Asp	Phe	Val	Ser	Tyr	Thr	Pro	Arg	Asp	Lys	Gln	Asn	Leu
		115					120					125			
His	Glu	Asn	Leu	Gln	Gly	Leu	Gly	Pro	Gly	Val	Arg	Val	Glu	Ser	Leu
	130					135					140				
Glu	Leu	Ala	Ile	Arg	Lys	Glu	Ile	His	Asp	Phe	Ala	Gln	Leu	Ser	Glu
145					150					155					160
Asn	Thr	Tyr	His	Val	Tyr	His	Asn	Thr	Glu	Asp	Leu	Trp	Gly	Glu	Pro
			165						170					175	
His	Ala	Val	Ala	Ile	His	Gly	Glu	Asp	Asp	Leu	His	Val	Thr	Glu	Glu
			180					185					190		
Val	Tyr	Lys	Arg	Pro	Leu	Phe	Leu	Gln	Pro	Thr	Tyr	Arg	Tyr	His	Arg
	195						200					205			
Leu	Pro	Leu	Pro	Glu	Gln	Gly	Ser	Pro	Leu	Glu	Ala	Gln	Leu	Asp	Ala
	210				215						220				
Phe	Val	Ser	Val	Leu	Arg	Glu	Thr	Pro	Ser	Leu	Leu	Gln	Leu	Arg	Asp
225					230					235					240
Ala	His	Gly	Pro	Pro	Pro	Ala	Leu	Val	Phe	Ser	Cys	Gln	Met	Gly	Val
			245						250				255		
Gly	Arg	Thr	Asn	Leu	Gly	Met	Val	Leu	Gly	Thr	Leu	Ile	Leu	Leu	His
			260					265					270		
Arg	Ser	Gly	Thr	Thr	Ser	Gln	Pro	Glu	Ala	Ala	Pro	Thr	Gln	Ala	Lys
	275						280						285		
Pro	Leu	Pro	Met	Glu	Gln	Phe	Gln	Val	Ile	Gln	Ser	Phe	Leu	Arg	Met
	290					295					300				
Val	Pro	Gln	Gly	Arg	Arg	Met	Val	Glu	Glu	Val	Asp	Arg	Ala	Ile	Thr
305					310					315					320
Ala	Cys	Ala	Glu	Leu	His	Asp	Leu	Lys	Glu	Val	Val	Leu	Glu	Asn	Gln
			325						330					335	
Lys	Lys	Leu	Glu	Gly	Ile	Arg	Pro	Glu	Ser	Pro	Ala	Gln	Gly	Ser	Gly
		340						345					350		
Ser	Arg	His	Ser	Val	Trp	Gln	Arg	Ala	Leu	Trp	Ser	Leu	Glu	Arg	Tyr
	355					360						365			
Phe	Tyr	Leu	Ile	Leu	Phe	Asn	Tyr	Tyr	Leu	His	Glu	Gln	Tyr	Pro	Leu
	370					375					380				
Ala	Phe	Ala	Leu	Ser	Phe	Ser	Arg	Trp	Leu	Cys	Ala	His	Pro	Glu	Leu
385					390					395					400
Tyr	Arg	Leu	Pro	Val	Thr	Leu	Ser	Ser	Ala	Gly	Pro	Val	Ala	Pro	Arg
			405						410					415	
Asp	Leu	Ile	Ala	Arg	Gly	Ser	Leu	Arg	Glu	Asp	Asp	Leu	Val	Ser	Pro
		420						425					430		
Asp	Ala	Leu	Ser	Thr	Val	Arg	Glu	Met	Asp	Val	Ala	Asn	Phe	Arg	Arg
	435						440					445			
Val	Pro	Arg	Met	Pro	Ile	Tyr	Gly	Thr	Ala	Gln	Pro	Ser	Ala	Lys	Ala
	450					455					460				
Leu	Gly	Ser	Ile	Leu	Ala	Tyr	Leu	Thr	Asp	Ala	Lys	Arg	Arg	Leu	Arg
465				470					475						480
Lys	Val	Val	Trp	Val	Ser	Leu	Arg	Glu	Glu	Ala	Val	Leu	Glu	Cys	Asp

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ntcatgaaaa ttaaaaaatg gcttgggtgta gcagcccttg ctacagtcgc aggtttggct
60
cttcgagctt gcggaaactc agaaaagaaa gcagacaatg caacaactat caaaatcgca
120
actgttaacc gtagcgggtc tgaagaaaaa cgttggggaca aaatccaaga attggttaaa
180
aaagacggta tcactttgga atttacggag ttcacaggct actcacaacc aaacaaggca
240
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actgctgatg gcgaagtaga tttgaacgct ttccaacact ataacttctt gaacaactgg
 300
 aacaaagaaa acgggaaaga ccttgtagcg attgcagata cttacatctc tccaatccgt
 360
 ctttactcag gtttgaatgg aagtgacaac aagtacacta aagtagaggc tggagtgtgc
 420
 tcgcga
 426

<210> 1746
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 1746
 Xaa Met Lys Ile Lys Lys Trp Leu Gly Val Ala Ala Leu Ala Thr Val
 1 5 10 15
 Ala Gly Leu Ala Leu Ala Ala Cys Gly Asn Ser Glu Lys Lys Ala Asp
 20 25 30
 Asn Ala Thr Thr Ile Lys Ile Ala Thr Val Asn Arg Ser Gly Ser Glu
 35 40 45
 Glu Lys Arg Trp Asp Lys Ile Gln Glu Leu Val Lys Lys Asp Gly Ile
 50 55 60
 Thr Leu Glu Phe Thr Glu Phe Thr Gly Tyr Ser Gln Pro Asn Lys Ala
 65 70 75 80
 Thr Ala Asp Gly Glu Val Asp Leu Asn Ala Phe Gln His Tyr Asn Phe
 85 90 95
 Leu Asn Asn Trp Asn Lys Glu Asn Gly Lys Asp Leu Val Ala Ile Ala
 100 105 110
 Asp Thr Tyr Ile Ser Pro Ile Arg Leu Tyr Ser Gly Leu Asn Gly Ser
 115 120 125
 Asp Asn Lys Tyr Thr Lys Val Glu Ala Gly Val Cys Ser Arg
 130 135 140

<210> 1747
 <211> 373
 <212> DNA
 <213> Homo sapiens

<400> 1747
 nnaagctttt gtccacacag ataggaagta atcatgggtca ctcaccgccc agaactgcat
 60
 atcaccgccc ctgaaggcgt gttggaggca ccggcggggt cgctcctcaa ggacggcacg
 120
 tggcacatca tgtaccagta cgaaccacac gcggatgggc acggcctctg gggacatgtc
 180
 acttccccca acttctctcc ctttaactgg acagacggag aagacattct ggttccagag
 240
 ggcgaggaaa ccgacctgtg gccaggttct gttattagca acgctggaaa agtgacgctg
 300
 ttttttacct ccgtcaaggg cgacnaagac ggaaatccat cgggcagatg tcgccgacgg
 360
 caaagctacg cgt
 373

<210> 1748
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 1748
 Met Val Thr His Arg Pro Glu Leu His Ile Thr Ala Pro Glu Gly Val
 1 5 10 15
 Leu Glu Ala Pro Ala Gly Ser Leu Leu Lys Asp Gly Thr Trp His Ile
 20 25 30
 Met Tyr Gln Tyr Glu Pro His Ala Asp Gly His Gly Leu Trp Gly His
 35 40 45
 Val Thr Ser Pro Asn Phe Ser Pro Phe Asn Trp Thr Asp Gly Glu Asp
 50 55 60
 Ile Leu Val Pro Glu Gly Glu Glu Thr Asp Leu Trp Ala Gly Ser Val
 65 70 75 80
 Ile Ser Asn Ala Gly Lys Val Thr Leu Phe Phe Thr Ser Val Lys Gly
 85 90 95
 Asp Xaa Asp Gly Asn Pro Ser Gly Arg Cys Arg Arg Arg Gln Ser Tyr
 100 105 110
 Ala

<210> 1749
 <211> 853
 <212> DNA
 <213> Homo sapiens

<400> 1749
 cccagcagggc aaagagagag gcctccctgg cttcgagtgt caggggagcc gcgttccttc
 60
 ccagggctgg agcagaggac cacaaggcag cagaaagcgc ggggccagat gagggccagg
 120
 aaggggagga gaggtagggc caagaacgag ccttaaggga gcagtcctca gctggagcca
 180
 cccagggctg ggtctgggag tcctcagtgt ccacttgtcc caggtagggg ggcttgcttc
 240
 gctctctcca gggccagtct ctgtgtgtgg ggactcagcc cgtggccggc agatgccatc
 300
 caggatgtac aagggtgcagc caaggcaggg catgcagggg ccgggcctgt ctgcagctgg
 360
 tggatgcctg tgggcatggc tttctctggg gacccattc ctgtcagtag caaccctggc
 420
 agtgtccgga gcggctctag acaactttgg tcataggaac tctggagggtg gggtctggtc
 480
 atctgagggtg gctactcaac aggtttgagg cccacagca acagaagtcc aggacccact
 540
 aggttgcttc agaagcccta agactgatga gctggagcgc gcatttgaga gaagcctcgc
 600
 acccactgtg tactggcccc gctcaggccg gcctggcaca ccgttgctg ctggcggtc
 660
 tcatggggaa gcgcctgggc actggggatt gcttgtgggc cactcaactc ttggggcagt
 720

ggccgtaacc ctagtttgcc tgaggccctt atgtcccctt atgttcctgg tactggagct
 780
 tgagctcttg cctggcacgc tgcagctgca cccaccctgc ttgatccac ctgggaggcc
 840
 aggacactga gga
 853

<210> 1750
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 1750
 Glu Lys Pro Arg Thr His Cys Val Leu Ala Pro Leu Arg Pro Ala Trp
 1 5 10 15
 His Thr Val Ala Cys Trp Arg Leu Ser Trp Gly Ser Ala Trp Ala Leu
 20 25 30
 Gly Ile Ala Cys Gly Pro Leu Asn Ser Trp Gly Ser Gly Arg Asn Pro
 35 40 45
 Ser Leu Pro Glu Ala Leu Met Ser Pro Tyr Val Pro Gly Thr Gly Ala
 50 55 60

<210> 1751
 <211> 531
 <212> DNA
 <213> Homo sapiens

<400> 1751
 ggccgcatcc cgcattctggg ccgatggcga atgggcaatt tcagtgcgag acagggacat
 60
 gacgatgccg ttgtcgagaa ggccatggcg acgaccgggg tctccgagct tactgatagg
 120
 gcatggctct ccctgtcagg aggagagagg caacgggtac agctggctcg tgccctggca
 180
 caggagcccg agatcttatt tcttgacgag ccgacaaatc accttgactt gccacaccag
 240
 atcgacctcc tggagcgggt ccgaggactc ggctgacga cggtcaccgt cattcatgac
 300
 ctcgacttgg ctgccgccta cgccgacgac ctcacgtgac tcgactcggg tcgcatgggt
 360
 gctggcggac cggcgagcac agtgcgtgac cctggccttg tccgtgacca ctttggtgtc
 420
 gacggtgagg tttggtcctc ctcgaggcgc ggcttcacct ggaacgggct gcagacatga
 480
 cgacgcgtat cgcagtatcc ctccgatggg acgacgccat tgacttgagc c
 531

<210> 1752
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 1752
 Gly Arg Ile Pro His Leu Gly Arg Trp Arg Met Gly Asn Phe Ser Arg

```

      1           5           10           15
Arg Gln Gly His Asp Asp Ala Val Val Glu Lys Ala Met Ala Thr Thr
      20           25           30
Gly Val Ser Glu Leu Thr Asp Arg Ala Trp Ser Ser Leu Ser Gly Gly
      35           40           45
Glu Arg Gln Arg Val Gln Leu Ala Arg Ala Leu Ala Gln Glu Pro Glu
      50           55           60
Ile Leu Phe Leu Asp Glu Pro Thr Asn His Leu Asp Leu Pro His Gln
      65           70           75           80
Ile Asp Leu Leu Glu Arg Val Arg Gly Leu Gly Leu Thr Thr Val Thr
      85           90           95
Val Ile His Asp Leu Asp Leu Ala Ala Tyr Ala Asp Asp Leu Ile
      100          105          110
Val Leu Asp Ser Gly Arg Met Val Ala Gly Gly Pro Ala Ser Thr Val
      115          120          125
Leu Thr Pro Gly Leu Val Arg Asp His Phe Gly Val Asp Gly Glu Val
      130          135          140
Trp Ser Ser Ser Arg Arg Gly Phe Thr Trp Asn Gly Leu Gln Thr
      145          150          155

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<210> 1753

<211> 920

<212> DNA

<213> Homo sapiens

<400> 1753

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gagacagtgg agaggctggg tcagtccctt gccagggaca ccccggtcct ggggccttgc
60
tgggacccga tggtcttggg gactcagggc cgctgtgtgc tggacaggga ttccaaggac
120
acacagacca ggatcagcca aaagggccgc cgtctgcagc ccccggggac tccctcggcc
180
ccaccccaga gaagggcccg gaaacagctg aacccttgcg ggggcaccga gagagtggac
240
cctgggttcg aggggggtgac tctgaagttt cagataaagc cggactccag cctgcagatc
300
atccccacgt acagcctgcc ctgcagtagc cgttctcagg aatccctgc agatgctgtt
360
gggggcntg cagccatccc agagggcacc gagggccact cagcaggcag cgaggccctg
420
gagccccggc gctgtgtctt ctgtcggacc cagaggaccc cgctctggag agacgctgaa
480
gatgggaccc ttctctgcaa cgctgttggg atcaggtaca agaaatacgg cactcgctgc
540
tccagctgct ggctggtgcc caggaaaaat gtccagccca agaggctatg tggcagatgt
600
ggagtgtccc tggaccccat tcaggaaggt taaaccacgc ttcaccctgc tgagctgctg
660
cttctgcctc cgtttcacca gtggggagaat gggcagaagc agctctccta ggaggattgg
720
ggaaagagcc ggctgtcctc ctctctgcca tctccagatt caaggatccc gggggaagac
780
ccaggcctca ggtggcagag cctgctaggg gtcaccagcc ccttctccag tcagccttgg
840

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ccgaggcccc ctcaggagac gctctcagga aggatgagca ttgttacagc agggacaata
 900
 aagtacagag atatgccgag
 920

<210> 1754
 <211> 210
 <212> PRT
 <213> Homo sapiens

<400> 1754
 Glu Thr Val Glu Arg Leu Gly Gln Ser Pro Ala Gln Asp Thr Pro Val
 1 5 10 15
 Leu Gly Pro Cys Trp Asp Pro Met Ala Leu Gly Thr Gln Gly Arg Leu
 20 25 30
 Leu Leu Asp Arg Asp Ser Lys Asp Thr Gln Thr Arg Ile Ser Gln Lys
 35 40 45
 Gly Arg Arg Leu Gln Pro Pro Gly Thr Pro Ser Ala Pro Pro Gln Arg
 50 55 60
 Arg Pro Arg Lys Gln Leu Asn Pro Cys Arg Gly Thr Glu Arg Val Asp
 65 70 75 80
 Pro Gly Phe Glu Gly Val Thr Leu Lys Phe Gln Ile Lys Pro Asp Ser
 85 90 95
 Ser Leu Gln Ile Ile Pro Thr Tyr Ser Leu Pro Cys Ser Ser Arg Ser
 100 105 110
 Gln Glu Ser Pro Ala Asp Ala Val Gly Gly Xaa Ala Ala Ile Pro Glu
 115 120 125
 Gly Thr Glu Gly His Ser Ala Gly Ser Glu Ala Leu Glu Pro Arg Arg
 130 135 140
 Cys Ala Ser Cys Arg Thr Gln Arg Thr Pro Leu Trp Arg Asp Ala Glu
 145 150 155 160
 Asp Gly Thr Leu Leu Cys Asn Ala Cys Gly Ile Arg Tyr Lys Lys Tyr
 165 170 175
 Gly Thr Arg Cys Ser Ser Cys Trp Leu Val Pro Arg Lys Asn Val Gln
 180 185 190
 Pro Lys Arg Leu Cys Gly Arg Cys Gly Val Ser Leu Asp Pro Ile Gln
 195 200 205
 Glu Gly
 210

<210> 1755
 <211> 437
 <212> DNA
 <213> Homo sapiens

<400> 1755
 nnttctgcag agtagggaga cagtcttggg cctggatggc cattagtgct tggagtcag
 60
 ggagcaatca gaaatgatca aggagaatcc ttgatacgaa ctgcattcca gtgtcttcag
 120
 ttgggttgta cagattttct accaacaatg ccttgactt gcctgcaa atgttgtagat
 180
 gttgcaggta gctttggcct ccataaccaa gaactcaata ttagtttaac ttcaatagg
 240

ttattgtgga atatttcaga ttatttttttc caaagagggg aaactattga aaaagaacta
 300
 aataaggaag aggcagcaca gcaaaagcag gcagaagaga aaggagtgtgt tttaaactcgg
 360
 ccattccacc ctgcaccgcc atttgattgc ttgtgggttat gtctttatgc aaaattgggt
 420
 gaactatgtg tggatcc
 437

<210> 1756

<211> 126

<212> PRT

<213> Homo sapiens

<400> 1756

Met	Gly	Ala	Ile	Arg	Asn	Asp	Gln	Gly	Glu	Ser	Leu	Ile	Arg	Thr	Ala
1				5				10					15		
Phe	Gln	Cys	Leu	Gln	Leu	Val	Val	Thr	Asp	Phe	Leu	Pro	Thr	Met	Pro
			20					25				30			
Cys	Thr	Cys	Leu	Gln	Ile	Val	Val	Asp	Val	Ala	Gly	Ser	Phe	Gly	Leu
			35				40					45			
His	Asn	Gln	Glu	Leu	Asn	Ile	Ser	Leu	Thr	Ser	Ile	Gly	Leu	Leu	Trp
	50					55					60				
Asn	Ile	Ser	Asp	Tyr	Phe	Phe	Gln	Arg	Gly	Glu	Thr	Ile	Glu	Lys	Glu
65					70					75				80	
Leu	Asn	Lys	Glu	Glu	Ala	Ala	Gln	Gln	Lys	Gln	Ala	Glu	Glu	Lys	Gly
			85					90					95		
Val	Val	Leu	Asn	Arg	Pro	Phe	His	Pro	Ala	Pro	Pro	Phe	Asp	Cys	Leu
			100					105				110			
Trp	Leu	Cys	Leu	Tyr	Ala	Lys	Leu	Gly	Glu	Leu	Cys	Val	Asp		
		115					120					125			

<210> 1757

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 1757

nggatccgac ggaaatagaa ttgaaggcat tctaaaatgg ctaaccgtac agtgaaggat
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 gcgcacagca tccatggcac caaccctcaa tatctggtgg agaagatcat tcgaacgcga
 120
 atctatgagt ccaagtactg gaaagaggag tgctttggac ttacagctga acttgtagtc
 180
 gataaagcca tggagttaag gtttgtgggt ggcgtctatg gtggcaacat aaaaccaaca
 240
 ccccttctgt gtttaacctt gaagatgctt caaattcaac ccgagaagga tatcattgta
 300
 gagtttatca aaaatgaaga tttcaagtat gtccgcatgc tgggggcact ttacatgagg
 360
 ctgacaggca ctgcaattga ttgctacaag tacttggaaac ctttgtacaa tgactatcga
 420
 aaaatcaaga gccagaaccg aaatggggag tttgaattga tgcattgtga tgagtttatt
 480

gatgaactat tgcacagtga gagagtctgt gatatcattc tgccccgact acagaaacgc
 540
 tatgtattag aggaagctga gcaactggag cctcgagtta gtgctctgga agaggacatg
 600
 gatgatgtgg agtccagtga agaggaagaa gaggaggatg agaagttgga aagagtgcc
 660
 tcacctgac accgccggag aagctaccga gacttggaca agccccgtcg ctctcccaca
 720
 ctgctctaca ggaggagtag gagccggtct cccagaaggc ggagtcgac tcccaaaagg
 780
 agaagccccct cccctcgccg agaaaggcat cggagcaaga gtccaagacg tcaccgcagc
 840
 aggtcccgag atcggcggca cagatcccg tccaagtccc caggtcatca ccgtagtcac
 900
 agacacagga gccactcaaa gtctcccgaa aggtctaaga agagccacaa gaagagccgg
 960
 agaggaatg agtaatggac tcagtttggg tttagtccac atggcctcct gtggatataa
 1020
 ggatatctgt atgtggaagg attaagatct cccccaggca gctataagaa tatttttagtt
 1080
 tttttcttat caagtttctc aacctttatt tttaatgaag gaggtgctga gttttgtatc
 1140
 tttttaatca taatcaacat cagtttttga cccaactaac cttgactgta ttcaaactta
 1200
 tgagagtata aaggatctgg aggttgggga tatgactgac aaggaaaggc tgtggccacc
 1260
 tgatgaccct ttcccttttt attaaaccgg acacacc
 1297

<210> 1758

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1758

Met	Ala	Asn	Arg	Thr	Val	Lys	Asp	Ala	His	Ser	Ile	His	Gly	Thr	Asn
1				5				10					15		
Pro	Gln	Tyr	Leu	Val	Glu	Lys	Ile	Ile	Arg	Thr	Arg	Ile	Tyr	Glu	Ser
			20					25					30		
Lys	Tyr	Trp	Lys	Glu	Glu	Cys	Phe	Gly	Leu	Thr	Ala	Glu	Leu	Val	Val
			35				40					45			
Asp	Lys	Ala	Met	Glu	Leu	Arg	Phe	Val	Gly	Gly	Val	Tyr	Gly	Gly	Asn
			50			55					60				
Ile	Lys	Pro	Thr	Pro	Phe	Leu	Cys	Leu	Thr	Leu	Lys	Met	Leu	Gln	Ile
					70					75				80	
Gln	Pro	Glu	Lys	Asp	Ile	Ile	Val	Glu	Phe	Ile	Lys	Asn	Glu	Asp	Phe
				85					90					95	
Lys	Tyr	Val	Arg	Met	Leu	Gly	Ala	Leu	Tyr	Met	Arg	Leu	Thr	Gly	Thr
				100				105					110		
Ala	Ile	Asp	Cys	Tyr	Lys	Tyr	Leu	Glu	Pro	Leu	Tyr	Asn	Asp	Tyr	Arg
				115			120					125			
Lys	Ile	Lys	Ser	Gln	Asn	Arg	Asn	Gly	Glu	Phe	Glu	Leu	Met	His	Val
				130			135				140				
Asp	Glu	Phe	Ile	Asp	Glu	Leu	Leu	His	Ser	Glu	Arg	Val	Cys	Asp	Ile

```

145          150          155          160
Ile Leu Pro Arg Leu Gln Lys Arg Tyr Val Leu Glu Glu Ala Glu Gln
          165          170          175
Leu Glu Pro Arg Val Ser Ala Leu Glu Glu Asp Met Asp Asp Val Glu
          180          185          190
Ser Ser Glu Glu Glu Glu Glu Glu Asp Glu Lys Leu Glu Arg Val Pro
          195          200          205
Ser Pro Asp His Arg Arg Arg Ser Tyr Arg Asp Leu Asp Lys Pro Arg
          210          215          220
Arg Ser Pro Thr Leu Arg Tyr Arg Arg Ser Arg Ser Arg Ser Pro Arg
225          230          235          240
Arg Arg Ser Arg Ser Pro Lys Arg Arg Ser Pro Ser Pro Arg Arg Glu
          245          250          255
Arg His Arg Ser Lys Ser Pro Arg Arg His Arg Ser Arg Ser Arg Asp
          260          265          270
Arg Arg His Arg Ser Arg Ser Lys Ser Pro Gly His His Arg Ser His
          275          280          285
Arg His Arg Ser His Ser Lys Ser Pro Glu Arg Ser Lys Lys Ser His
          290          295          300
Lys Lys Ser Arg Arg Gly Asn Glu
305          310

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<210> 1759

<211> 324

<212> DNA

<213> Homo sapiens

<400> 1759

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aattccatag tcctcatggg caagagttac acagcgtgga ggaccaactc ccaggcactc
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ggcctgggca gacacaatta ttgtcggaat ccagatgggtg atgccagacc ttggtgccat
120
gtgatgaagg accgaaagct gacgtgggaa tactgtgaca tgtcccatg ctccacctgt
180
ggcctgaggc agtgcaaacg gcctcagttt agaactaaag gaggactcta cacagacatc
240
acctcacacc cttggcaggc tgccatcttt gtcagcaaca agaggtctcc tggagagaga
300
ttcctttgtg gaggggtgct gatc
324

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<210> 1760

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1760

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Asn Ser Ile Val Leu Met Gly Lys Ser Tyr Thr Ala Trp Arg Thr Asn
1          5          10          15
Ser Gln Ala Leu Gly Leu Gly Arg His Asn Tyr Cys Arg Asn Pro Asp
          20          25          30
Gly Asp Ala Arg Pro Trp Cys His Val Met Lys Asp Arg Lys Leu Thr
          35          40          45
Trp Glu Tyr Cys Asp Met Ser Pro Cys Ser Thr Cys Gly Leu Arg Gln

```

```

      50              55              60
Cys Lys Arg Pro Gln Phe Arg Thr Lys Gly Gly Leu Tyr Thr Asp Ile
65              70              75              80
Thr Ser His Pro Trp Gln Ala Ala Ile Phe Val Ser Asn Lys Arg Ser
      85              90              95
Pro Gly Glu Arg Phe Leu Cys Gly Gly Val Leu Ile
      100              105

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<210> 1761
 <211> 351
 <212> DNA
 <213> Homo sapiens

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<400> 1761
ngcgatctcg gctcactaca acctcgggtga cagagcgaga ctctatccca aaaaaataaa
60
aataaaaaatc aactggagaa ggaaatgggg ttggggagca tcctctgaat atataaaggc
120
agccattcat ttaggagag gaggtagaag gaaatgctgt ttgtcgatgg ttcttttcca
180
gagaggaaga gaggagaaag gaagagcggg gagcaggtgg ggagcccgca gtaagacccc
240
acagtggggc caggtggtct tgcacctgt attcccactt tggctggggc agcccagagt
300
ccaggccagc aggtaatgcc ccagccatgc ccaactcggtc ctattggatc c
351

```

<210> 1762
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 1762
Met Ala Gly Ala Leu Pro Ala Gly Leu Asp Ser Gly Leu Pro Gln Pro
1              5              10              15
Lys Trp Glu Tyr Arg Val Gln Asp His Leu Ala Pro Leu Trp Gly Leu
      20              25              30
Thr Ala Gly Ser Pro Pro Ala Pro Arg Ser Ser Phe Leu Leu Ser Ser
      35              40              45
Ser Leu Glu Lys Asn His Arg Gln Thr Ala Phe Pro Ser Thr Ser Ser
      50              55              60
Pro Thr Met Asn Gly Cys Leu Tyr Ile Phe Arg Gly Cys Ser Pro Thr
65              70              75              80
Pro Phe Pro Ser Pro Val Asp Phe Tyr Phe Tyr Phe Phe Gly Ile Glu
      85              90              95
Ser Arg Ser Val Thr Glu Val Val Val Ser Arg Asp Arg
      100              105

```

<210> 1763
 <211> 356
 <212> DNA
 <213> Homo sapiens

<400> 1763

gcgcgcgcggg ggcgcgatgt ggagcgggca cttaccggtt tcatggccaa gacaggcgag
 60
 actcagagtc ttttcaaaga tgacgtcagc acatttccat tgattgctgc cagaccttcc
 120
 accatcccct acctgacagc tcttcttccg tctgaactgg agatgcaaca aatggaagag
 180
 acagattcct cggagcagga tgaacagaca gacacagaga accttgctct tcatatcagc
 240
 atggaggatt ctggagccga gaaagagaac acctctgtcc tgcagcagaa cccctccttg
 300
 tcgggtagcc ggaatgggga ggagaacatc atcgataacc cttatctgcg accggt
 356

<210> 1764

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1764

Ala	Arg	Arg	Gly	Arg	Asp	Val	Glu	Arg	Ala	Leu	Thr	Arg	Phe	Met	Ala
1				5					10					15	
Lys	Thr	Gly	Glu	Thr	Gln	Ser	Leu	Phe	Lys	Asp	Asp	Val	Ser	Thr	Phe
		20						25					30		
Pro	Leu	Ile	Ala	Ala	Arg	Pro	Phe	Thr	Ile	Pro	Tyr	Leu	Thr	Ala	Leu
	35						40					45			
Leu	Pro	Ser	Glu	Leu	Glu	Met	Gln	Gln	Met	Glu	Glu	Thr	Asp	Ser	Ser
	50					55				60					
Glu	Gln	Asp	Glu	Gln	Thr	Asp	Thr	Glu	Asn	Leu	Ala	Leu	His	Ile	Ser
65					70				75					80	
Met	Glu	Asp	Ser	Gly	Ala	Glu	Lys	Glu	Asn	Thr	Ser	Val	Leu	Gln	Gln
			85						90				95		
Asn	Pro	Ser	Leu	Ser	Gly	Ser	Arg	Asn	Gly	Glu	Glu	Asn	Ile	Ile	Asp
			100					105					110		
Asn	Pro	Tyr	Leu	Arg	Pro										
			115												

<210> 1765

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1765

cggccgcatt cttcgtgact ggcgccccgc cgccggtgca aaagtgtcag gaaataccag
 60
 tcatgactat gtttagccgc acctctctgc agtatgcgat cgttctggca gcgctgggag
 120
 gtgcccgtct ggcgctctgg gccatgtcga gtgcgacgga ggccaatcag gcggaaattg
 180
 cccaggccag gccaggcatt attgcggcgg cgcgcggtgt cgtggatgtc gagggcgggc
 240
 tgctgcggct ctccaccag cgcgacgggg tgattcagga tgtgccggtg aaggaaggac
 300
 agcgggtcaa agccggcgat atcctcgccg cgctcgacaa tcgccgcgaa ctgatcg
 357

<210> 1766
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1766
 Met Thr Met Phe Ser Arg Thr Ser Leu Gln Tyr Ala Ile Val Leu Ala
 1 5 10 15
 Ala Leu Gly Gly Ala Gly Leu Ala Leu Trp Ala Met Ser Ser Ala Thr
 20 25 30
 Glu Ala Asn Gln Ala Glu Ile Ala Gln Ala Arg Pro Gly Ile Ile Ala
 35 40 45
 Ala Ala Arg Gly Val Val Asp Val Glu Gly Gly Leu Leu Arg Leu Ser
 50 55 60
 Thr Gln Arg Asp Gly Val Ile Gln Asp Val Pro Val Lys Glu Gly Gln
 65 70 75 80
 Arg Val Lys Ala Gly Asp Ile Leu Ala Ala Leu Asp Asn Arg Arg Glu
 85 90 95
 Leu Ile

<210> 1767
 <211> 297
 <212> DNA
 <213> Homo sapiens

<400> 1767
 nnncgccgac ggccgccatg acgcaccgca ttgacgtgaa ccagggcgac gatgcccaacc
 60
 ccggccaaca cgccaggctg cttgacgccg ccagccaacc cgacgaacgc cccaccaaga
 120
 acgagcccga gccatccccg gccaatcaac gccagacgta tggccacaac gagtgcgacg
 180
 agggacaaac ccacctggag tccgtcggtg tgcattgccc ccaccacgct caacgtcgtc
 240
 aatggacagc acaccgccag ccagagggca tgatccggat cggttccggc gtagcgn
 297

<210> 1768
 <211> 73
 <212> PRT
 <213> Homo sapiens

<400> 1768
 Met Pro Thr Pro Ala Asn Thr Pro Gly Cys Leu Thr Pro Pro Ala Asn
 1 5 10 15
 Pro Thr Asn Ala Pro Pro Arg Thr Ser Pro Ser His Pro Arg Pro Ile
 20 25 30
 Asn Ala Arg Arg Met Ala Thr Thr Ser Ala Thr Arg Asp Lys Pro Thr
 35 40 45
 Trp Ser Pro Ser Leu Cys Met Pro Pro Thr Thr Leu Asn Val Val Asn
 50 55 60
 Gly Gln His Thr Ala Ser Gln Arg Ala

65

70

<210> 1769

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1769

caccatgctg gctcgggttcg acgcattcgg gtgggtgagt ctgttctcgt caccgacggg
 60
 cagggtcatg ccggttcgtgg ccctgccatt gaggtgacga aagggtcagt tagcgtcgag
 120
 accgttgaga tcctccatac tcccgcgacc acgcctcgat gggtcgccgt ccaggcattg
 180
 ccgaagtccg atagagctga gctggcggtg gcgaccctca ccgagatggg agttcacgaa
 240
 atcctcgctt ggcaggctga tcggagcatc gtgcgatgga agggcgacaa gcaagccaag
 300
 ggctgcgcga ggtggcaagc ggctgccgt gagggcacca aacagtctcg acgttttctt
 360
 gtgccacagg tagaactagc gcaaaccctg gaagttgtta agcggatttg caatgccag
 420
 gccgcctacg ttttgacga gtcggccagt gaaccgctgg tgcacagga gctc
 474

<210> 1770

<211> 158

<212> PRT

<213> Homo sapiens

<400> 1770

His	His	Ala	Gly	Ser	Val	Arg	Arg	Ile	Arg	Val	Gly	Glu	Ser	Val	Leu
1				5				10						15	
Val	Thr	Asp	Gly	Gln	Gly	His	Ala	Val	Arg	Gly	Pro	Ala	Ile	Glu	Val
		20						25					30		
Thr	Lys	Gly	Ser	Val	Ser	Val	Glu	Thr	Val	Glu	Ile	Leu	His	Thr	Pro
		35					40					45			
Ala	Thr	Thr	His	Arg	Trp	Val	Ala	Val	Gln	Ala	Leu	Pro	Lys	Ser	Asp
		50				55				60					
Arg	Ala	Glu	Leu	Ala	Val	Ala	Thr	Leu	Thr	Glu	Met	Gly	Val	His	Glu
65				70				75						80	
Ile	Leu	Ala	Trp	Gln	Ala	Asp	Arg	Ser	Ile	Val	Arg	Trp	Lys	Gly	Asp
			85					90					95		
Lys	Gln	Ala	Lys	Gly	Val	Ala	Arg	Trp	Gln	Ala	Ala	Ala	Arg	Glu	Ala
		100						105					110		
Thr	Lys	Gln	Ser	Arg	Arg	Phe	Leu	Val	Pro	Gln	Val	Glu	Leu	Ala	Gln
		115				120						125			
Thr	Arg	Glu	Val	Val	Lys	Arg	Ile	Cys	Asn	Ala	Gln	Ala	Ala	Tyr	Val
		130				135					140				
Leu	His	Glu	Ser	Ala	Ser	Glu	Pro	Leu	Val	His	Gln	Glu	Leu		
145					150					155					

<210> 1771

<211> 287

<212> DNA

<213> Homo sapiens

<400> 1771

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acgcgtgatg ggtaattcta atacatgcaa agaattatct ctgcaagtat actcagatat
60
taataacagc ggggtgtcgc gaggaagaag cctgggagaa tgggaagtcag ggaaggagag
120
caacaggctt ctcaactctgt gccatgagca tgtgctagcc atggagacac tctgcatgtt
180
acctagaact gctgattcat tgctctggaa ttattcagct attcaagacc cagtgaataa
240
cagcaagcag ctttcattca tacacacaca tgtgcatcca tgtgcac
287
```

<210> 1772

<211> 93

<212> PRT

<213> Homo sapiens

<400> 1772

```
Met Gly Asn Ser Asn Thr Cys Lys Glu Leu Ser Leu Gln Val Tyr Ser
  1             5             10             15
Asp Ile Asn Asn Ser Gly Cys Arg Arg Gly Arg Ser Leu Gly Glu Trp
          20             25             30
Lys Ser Gly Lys Glu Ser Asn Arg Leu Leu Thr Leu Cys His Glu His
          35             40             45
Val Leu Ala Met Glu Thr Leu Cys Met Leu Pro Arg Thr Ala Asp Ser
  50             55             60
Leu Leu Trp Asn Tyr Ser Ala Ile Gln Asp Pro Val Lys Tyr Ser Lys
65             70             75             80
Gln Leu Ser Phe Ile His Thr His Val His Pro Cys Ala
          85             90
```

<210> 1773

<211> 393

<212> DNA

<213> Homo sapiens

<400> 1773

```
accggtgagt tctacgtccc ggttaaccac ctccggaggtg aacaggcgca cctcgacgtc
60
ttcgattctc cgcttaacga gtacgcagcg atgggatttg agtacggcta ctctgttgcc
120
cgtcgggatt ctctggtatt gtgggaagcc caattcggcg atttcaccaa cggtgcccag
180
acgatcatcg atgagttcat cgctcggct ggctccaagt ggggtcagaa gtcgggagtc
240
gtgctgctgc tgccgcacgg ttacgaaggt caggggcttg atcactcgtc ggcccgtctg
300
gagcgcttcc tcaatctatg cagtgaagac gctttggccg tctgccagcc ctcgaccccg
360
gcaagctaca gccatttatt gcgtcagcac gcg
393
```

<210> 1774
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 1774
 Thr Gly Glu Phe Tyr Val Pro Val Asn His Leu Gly Gly Glu Gln Ala
 1 5 10 15
 His Leu Asp Val Phe Asp Ser Pro Leu Asn Glu Tyr Ala Ala Met Gly
 20 25 30
 Phe Glu Tyr Gly Tyr Ser Val Ala Arg Pro Asp Ser Leu Val Leu Trp
 35 40 45
 Glu Ala Gln Phe Gly Asp Phe Thr Asn Gly Ala Gln Thr Ile Ile Asp
 50 55 60
 Glu Phe Ile Ala Ser Ala Gly Ser Lys Trp Gly Gln Lys Ser Gly Val
 65 70 75 80
 Val Leu Leu Leu Pro His Gly Tyr Glu Gly Gln Gly Pro Asp His Ser
 85 90 95
 Ser Ala Arg Leu Glu Arg Phe Leu Asn Leu Cys Ser Glu Asp Ala Leu
 100 105 110
 Ala Val Cys Gln Pro Ser Thr Pro Ala Ser Tyr Ser His Leu Leu Arg
 115 120 125
 Gln His Ala
 130

<210> 1775
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 1775
 nncctccgag cagctctccg gggcagaccc cagctgcaag ccacagcccg gccctggtaa
 60
 cgaggaggga tcgctaggga ggggtggggc ggcccggcct cgatgcagcc atgtgggagg
 120
 gccactctca gagaccccc gccttccttg ccacccccac ccagagggg aagctggagc
 180
 tgggaggctg cagacccagg ccaaggtgtg gccagggctg gctttcttgg gaggctttga
 240
 gcctctgct tctggccac ccagctctgg ggctgctgtc aactcttgat ttgtagacat
 300
 cactccagcc tctggcctgt caccctgaac ccccccatg tctgtgtctt ttctcactgg
 360
 aacaccggt
 369

<210> 1776
 <211> 59
 <212> PRT
 <213> Homo sapiens

<400> 1776
 Arg Glu Gly Ile Ala Arg Glu Gly Trp Gly Gly Pro Ala Ser Met Gln

```

1           5           10           15
Pro Cys Gly Arg Ala Thr Leu Arg Asp Pro Pro Pro Ser Leu Pro Pro
                20           25           30
Pro Pro Gln Arg Gly Ser Trp Ser Trp Glu Ala Ala Asp Pro Gly Gln
                35           40           45
Gly Val Ala Arg Ala Gly Phe Leu Gly Arg Leu
                50           55

```

<210> 1777
 <211> 370
 <212> DNA
 <213> Homo sapiens

```

<400> 1777
agcttccttat cactatcctt tagtgctttt tggctctacct tagcggtaat gctccatcaa
60
gaatatgggtt ttggtagtg c aactgcggga ttttttggcc tcgctgggtgc cgccggagct
120
ttagcagcac cactgtccgg taaactaaca gataaacaag gaccgacacg ggtcacgcag
180
ctgggtgctg ccttagttgt cgtctctttc gcactatgt tgttattgac ttacttcagt
240
atcagtaccc aagttataat gattattgtt gctaccatag tgtttgactt tgggtgttcag
300
gcggcactta ttgctcatca aaccttagtg tataacattg actctaccgc tcgtggacgc
360
cttaacgcgt
370

```

<210> 1778
 <211> 123
 <212> PRT
 <213> Homo sapiens

```

<400> 1778
Ser Phe Leu Ser Leu Ser Phe Ser Ala Phe Trp Ser Thr Leu Ala Val
1           5           10           15
Met Leu His Gln Glu Tyr Gly Phe Gly Ser Ala Thr Ala Gly Phe Phe
                20           25           30
Gly Leu Ala Gly Ala Ala Gly Ala Leu Ala Ala Pro Leu Ser Gly Lys
                35           40           45
Leu Thr Asp Lys Gln Gly Pro Thr Arg Val Thr Gln Leu Gly Ala Ala
                50           55           60
Leu Val Val Val Ser Phe Ala Ser Met Leu Leu Leu Pro Tyr Phe Ser
65           70           75           80
Ile Ser Thr Gln Val Ile Met Ile Ile Val Ala Thr Ile Val Phe Asp
                85           90           95
Phe Gly Val Gln Ala Ala Leu Ile Ala His Gln Thr Leu Val Tyr Asn
                100           105           110
Ile Asp Ser Thr Ala Arg Gly Arg Leu Asn Ala
                115           120

```

<210> 1779
 <211> 345

<212> DNA

<213> Homo sapiens

<400> 1779

ccatgtgtgt gtatatgctc gtgtgtgatg gtatgtatat gtgtatatgt gnntatatgt
60
atacacgtgt gttatgggtgt gtatatatgt atatacgtgt gtgtatatat atgtatatgg
120
gtatgtgtgt gcatgtgctg atgggtgtgt atatgtgtat atatgtagggt gtgtatatct
180
gggaatatat ggggtgtgtat atgtgtgtat aggtttttat atgtggggaa atatttaaac
240
ctgtgtatat tggaatgtgt gtgtatatgt gtgtatatat ggnggtgtgt atgtacatgt
300
atgtgtgtat atatgtgtgt atatacgtag gtgtgcatat gtgtg
345

<210> 1780

<211> 55

<212> PRT

<213> Homo sapiens

<400> 1780

Pro	Cys	Val	Cys	Ile	Cys	Ser	Cys	Val	Met	Val	Cys	Ile	Cys	Val	Tyr
1				5					10				15		
Val	Xaa	Ile	Cys	Ile	His	Val	Cys	Tyr	Gly	Val	Tyr	Ile	Cys	Ile	Tyr
			20					25					30		
Val	Cys	Val	Tyr	Ile	Cys	Ile	Trp	Val	Cys	Val	Cys	Met	Cys	Val	Trp
		35					40					45			
Val	Cys	Ile	Cys	Val	Tyr	Met									
	50					55									

<210> 1781

<211> 349

<212> DNA

<213> Homo sapiens

<400> 1781

nacgcgtcat gctaaatddd gccctttatg gcaacatddd cgtcagaaca agcgggaagag
60
aagctactat ccaagtttca tacgccgggtt aaaagaaaac atgatgatac gagatcatct
120
gatgtgaaca caacgcaaac tgggttcaagc gccacgcca ttacacctgt acccttactg
180
cccagtgcac aagagcccag ttatctttgc cagtgggtgcg ctocccagac acgaaagcac
240
aagacatggg aggggtgatgc tattcttata ttgcatggaa ataaaactac ttgttcgcta
300
cgatccgcac atgatggcag catgctagtg acgaatgctg ccttccgga
349

<210> 1782

<211> 107

<212> PRT

<213> Homo sapiens

<400> 1782

```

Met Ala Thr Phe Ser Ser Glu Gln Ala Glu Glu Lys Leu Leu Ser Lys
 1           5           10           15
Phe His Thr Pro Val Lys Arg Lys His Asp Asp Thr Arg Ser Ser Asp
          20           25           30
Val Asn Thr Thr Gln Thr Gly Ser Ser Ala Thr Pro Ile Thr Pro Val
          35           40           45
Pro Leu Leu Pro Ser Ala Gln Glu Pro Ser Tyr Leu Cys Gln Trp Cys
          50           55           60
Ala Pro Gln Thr Arg Lys His Lys Thr Trp Glu Gly Asp Ala Ile Leu
65           70           75           80
Ile Leu His Gly Asn Lys Thr Thr Cys Ser Leu Arg Ser Ala His Asp
          85           90           95
Gly Ser Met Leu Val Thr Asn Ala Ala Phe Arg
          100          105

```

<210> 1783

<211> 1829

<212> DNA

<213> Homo sapiens

<400> 1783

```

gtgcacgact tcgaagccag cctctcgggc atcgggcagg aactgggcgc cggcgcttac
60
agcatgagtg atgtcttggc attgcccatt ttcaagcagg aagattccag ccttccattg
120
gatggtgaaa cagagcacc accctttcag tatgtgatgt gtgctgcaac gtcaccagca
180
gtaaaactgc atgatgaaac gcttacttat ttgaaccaag gtcagtcata tgaaattcgg
240
atgctggata atcggaataa gggatgatgt cctgagatca atggaaaatt agtaaagagc
300
atcataaggg ttgtattcca tgacagacgg ctacaatata cagagcatca gcaacttgaa
360
ggatggaagt ggaatcgccc aggagacaga cttcttgatt tagatattcc aatgtctgtg
420
ggaataattg acacaaggac gaatccaggc cagttaaatt cggttgaatt tctgtgggac
480
ccagcaaaac gcacctctgc tttcattcag gtacactgca tcagcacaga atttactcca
540
cggaagcacg gaggtgaaaa gggagtgcgc tttaggatcc aggttgacac ctttaagcag
600
aatgaaaatg gagaatacac agatcatcta cactcagcta gctgccaaat caaagttttt
660
aagcctaaag gtgcagacag gaaacaaaaa actgaccgag agaagatgga gaagagaaca
720
gctcatgaaa aagaaaagta tcagccgtcc tatgatacca caatcctcac agagatgagg
780
cttgagccta taattgaaga tgcagttgaa catgagcaga aanaagtcca gcaagcggac
840
tttgccgcag actacggtga ttctctggca aagcgaggca gttgttctcc gtggcccgat
900

```

gccccacag cctatgtgaa taacagccct tccccagcgc ccactttcac ctccccacag
 960
 cagagcactt gcagtgtccc agacagcaat tcttcttccc caaatcatca gggagatgga
 1020
 gcttcacaga cctctgggtga acaaattcag ccttcagcta cgatccagga aacacagcaa
 1080
 tggctgtctca aaaacagatt ctcttcctac acaagactgt tctctaattt ttcaggtgcc
 1140
 gacttattaa aactgacaaa ggaggattta gttcaaattt gtggtgcagc cgatggaatt
 1200
 cggctctata attcactgaa gtcaaggctg gtttagacccc gtttaaccat ctatgtctgc
 1260
 cgggagcagc caagcagcac agtgctgcaa gggcagcagc aagctgcaag cagtgcgaagc
 1320
 gagaatggca gtggggcacc ctatgtttat catgcaatct acttggaaga aatgattgcc
 1380
 tcagaagttg ctcgaaaact tgcgctgggtg tttaatatcc ctctccacca aattaatcag
 1440
 gtttacagac aggggtccac cgggtattcac attcttggtta gtgatcaggt aaatcaaac
 1500
 atttgttttt ccttttcaga ctggtattta cttttataca tgtaattgta gaactgtaga
 1560
 aaaattctgt gacctctttt gaaaataact atgagaatca ttttcagaga gttgggaatc
 1620
 acttttgaag aacttataac caagagtttc aggcatecta gtgataatat ggaatacaag
 1680
 ccaaggaaaa ctggcttagc ctccccccag cccttttagga tgcagccaat cactggggca
 1740
 ctctagggat agtggcaggc tttggccctt tttatgaggt gagtcactgg atgtgttttc
 1800
 cttttgtcta ttatttgatg actaattta
 1829

<210> 1784

<211> 514

<212> PRT

<213> Homo sapiens

<400> 1784

Val	His	Asp	Phe	Asp	Ala	Ser	Leu	Ser	Gly	Ile	Gly	Gln	Glu	Leu	Gly
1			5						10					15	
Ala	Gly	Ala	Tyr	Ser	Met	Ser	Asp	Val	Leu	Ala	Leu	Pro	Ile	Phe	Lys
		20						25					30		
Gln	Glu	Asp	Ser	Ser	Leu	Pro	Leu	Asp	Gly	Glu	Thr	Glu	His	Pro	Pro
		35					40					45			
Phe	Gln	Tyr	Val	Met	Cys	Ala	Ala	Thr	Ser	Pro	Ala	Val	Lys	Leu	His
	50					55					60				
Asp	Glu	Thr	Leu	Thr	Tyr	Leu	Asn	Gln	Gly	Gln	Ser	Tyr	Glu	Ile	Arg
65					70				75					80	
Met	Leu	Asp	Asn	Arg	Lys	Met	Gly	Asp	Met	Pro	Glu	Ile	Asn	Gly	Lys
			85					90						95	
Leu	Val	Lys	Ser	Ile	Ile	Arg	Val	Val	Phe	His	Asp	Arg	Arg	Leu	Gln
			100					105						110	
Tyr	Thr	Glu	His	Gln	Gln	Leu	Glu	Gly	Trp	Lys	Trp	Asn	Arg	Pro	Gly

115				120				125							
Asp	Arg	Leu	Leu	Asp	Leu	Asp	Ile	Pro	Met	Ser	Val	Gly	Ile	Ile	Asp
130				135							140				
Thr	Arg	Thr	Asn	Pro	Gly	Gln	Leu	Asn	Ala	Val	Glu	Phe	Leu	Trp	Asp
145				150						155					160
Pro	Ala	Lys	Arg	Thr	Ser	Ala	Phe	Ile	Gln	Val	His	Cys	Ile	Ser	Thr
			165						170					175	
Glu	Phe	Thr	Pro	Arg	Lys	His	Gly	Gly	Glu	Lys	Gly	Val	Pro	Phe	Arg
			180						185				190		
Ile	Gln	Val	Asp	Thr	Phe	Lys	Gln	Asn	Glu	Asn	Gly	Glu	Tyr	Thr	Asp
			195				200						205		
His	Leu	His	Ser	Ala	Ser	Cys	Gln	Ile	Lys	Val	Phe	Lys	Pro	Lys	Gly
	210					215					220				
Ala	Asp	Arg	Lys	Gln	Lys	Thr	Asp	Arg	Glu	Lys	Met	Glu	Lys	Arg	Thr
225					230					235					240
Ala	His	Glu	Lys	Glu	Lys	Tyr	Gln	Pro	Ser	Tyr	Asp	Thr	Thr	Ile	Leu
			245						250					255	
Thr	Glu	Met	Arg	Leu	Glu	Pro	Ile	Ile	Glu	Asp	Ala	Val	Glu	His	Glu
			260				265						270		
Gln	Lys	Xaa	Val	Gln	Gln	Ala	Asp	Phe	Ala	Ala	Asp	Tyr	Gly	Asp	Ser
		275				280					285				
Leu	Ala	Lys	Arg	Gly	Ser	Cys	Ser	Pro	Trp	Pro	Asp	Ala	Pro	Thr	Ala
	290					295					300				
Tyr	Val	Asn	Asn	Ser	Pro	Ser	Pro	Ala	Pro	Thr	Phe	Thr	Ser	Pro	Gln
305					310					315					320
Gln	Ser	Thr	Cys	Ser	Val	Pro	Asp	Ser	Asn	Ser	Ser	Ser	Pro	Asn	His
			325						330					335	
Gln	Gly	Asp	Gly	Ala	Ser	Gln	Thr	Ser	Gly	Glu	Gln	Ile	Gln	Pro	Ser
			340				345						350		
Ala	Thr	Ile	Gln	Glu	Thr	Gln	Gln	Trp	Leu	Leu	Lys	Asn	Arg	Phe	Ser
		355				360							365		
Ser	Tyr	Thr	Arg	Leu	Phe	Ser	Asn	Phe	Ser	Gly	Ala	Asp	Leu	Leu	Lys
	370				375						380				
Leu	Thr	Lys	Glu	Asp	Leu	Val	Gln	Ile	Cys	Gly	Ala	Ala	Asp	Gly	Ile
385					390					395					400
Arg	Leu	Tyr	Asn	Ser	Leu	Lys	Ser	Arg	Ser	Val	Arg	Pro	Arg	Leu	Thr
			405						410					415	
Ile	Tyr	Val	Cys	Arg	Glu	Gln	Pro	Ser	Ser	Thr	Val	Leu	Gln	Gly	Gln
			420				425						430		
Gln	Gln	Ala	Ala	Ser	Ser	Ala	Ser	Glu	Asn	Gly	Ser	Gly	Ala	Pro	Tyr
		435				440							445		
Val	Tyr	His	Ala	Ile	Tyr	Leu	Glu	Glu	Met	Ile	Ala	Ser	Glu	Val	Ala
	450					455					460				
Arg	Lys	Leu	Ala	Leu	Val	Phe	Asn	Ile	Pro	Leu	His	Gln	Ile	Asn	Gln
465					470					475					480
Val	Tyr	Arg	Gln	Gly	Pro	Thr	Gly	Ile	His	Ile	Leu	Val	Ser	Asp	Gln
			485						490					495	
Val	Asn	Gln	Ile	Ile	Cys	Phe	Ser	Phe	Ser	Asp	Trp	Tyr	Leu	Leu	Leu
		500					505						510		

Tyr Met

<210> 1785

<211> 381

<212> DNA

<213> Homo sapiens

<400> 1785

atcacggacg cagaggagaa agggctgatt actccaggcg tgagtgttct gattgaacca
 60
 actagcggca acacaggcat tggactggcc tttatggctg ctgccaaggg ctacaaactt
 120
 acactcacia tgcttgcttc catgagcatg gagaggagga tcatattgaa ggcttttggg
 180
 gctgaacttg tccttactga cccactcttg ggaatgaaag gagctgtcaa gaaagcggaa
 240
 gagatacaag caaagacacc caactcgtac atccttcaac aatttgaaaa tccagctaac
 300
 ccaaagattc actatgagac tactgggcct gaaatctgga aagctacagc aggaaaaatt
 360
 gatggccttg tatctggtat c
 381

<210> 1786

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1786

Ile	Thr	Asp	Ala	Glu	Glu	Lys	Gly	Leu	Ile	Thr	Pro	Gly	Val	Ser	Val
1			5					10					15		
Leu	Ile	Glu	Pro	Thr	Ser	Gly	Asn	Thr	Gly	Ile	Gly	Leu	Ala	Phe	Met
			20				25					30			
Ala	Ala	Ala	Lys	Gly	Tyr	Lys	Leu	Thr	Leu	Thr	Met	Pro	Ala	Ser	Met
		35				40					45				
Ser	Met	Glu	Arg	Arg	Ile	Ile	Leu	Lys	Ala	Phe	Gly	Ala	Glu	Leu	Val
	50				55					60					
Leu	Thr	Asp	Pro	Leu	Leu	Gly	Met	Lys	Gly	Ala	Val	Lys	Lys	Ala	Glu
65				70				75					80		
Glu	Ile	Gln	Ala	Lys	Thr	Pro	Asn	Ser	Tyr	Ile	Leu	Gln	Gln	Phe	Glu
			85					90					95		
Asn	Pro	Ala	Asn	Pro	Lys	Ile	His	Tyr	Glu	Thr	Thr	Gly	Pro	Glu	Ile
		100					105						110		
Trp	Lys	Ala	Thr	Ala	Gly	Lys	Ile	Asp	Gly	Leu	Val	Ser	Gly	Ile	
	115					120						125			

<210> 1787

<211> 294

<212> DNA

<213> Homo sapiens

<400> 1787

gtgcacacag caattcaata tgccaagaca ccagggttgca gcagagaaaag atttaattgt
 60
 agggtcacct aacaaggaga tgagaacaaa ctttaaactct atctctctaa ggaatttgga
 120
 cttcgggttt ttaagggtta gaatgggcca aaacatggac attattgatt ggtcaaagag
 180

tacagggtca tggaacctgg agatgaaaaa gccatattct catgctgac ctgttcctct
 240
 gtggaaggtc ttcaaattgg ttgccggaat aaaagatctg tcaaacatct tagg
 294

<210> 1788
 <211> 91
 <212> PRT
 <213> Homo sapiens

<400> 1788
 Met Pro Arg His Gln Val Ala Ala Glu Lys Asp Leu Ile Val Gly Ser
 1 5 10 15
 Pro Asn Lys Glu Met Arg Thr Asn Phe Lys Ser Ile Ser Leu Arg Asn
 20 25 30
 Leu Asp Phe Gly Phe Leu Arg Phe Arg Met Gly Gln Asn Met Asp Ile
 35 40 45
 Ile Asp Trp Ser Lys Ser Thr Gly Ser Trp Asn Leu Glu Met Lys Lys
 50 55 60
 Pro Tyr Ser His Ala Asp Pro Val Pro Leu Trp Lys Val Phe Lys Leu
 65 70 75 80
 Val Ala Gly Ile Lys Asp Leu Ser Asn Ile Leu
 85 90

<210> 1789
 <211> 353
 <212> DNA
 <213> Homo sapiens

<400> 1789
 ttccacata caccacgcg gcatgtcctg acagagatgc acaccctag cacatattca
 60
 cacacacaga catgccacac cccgccatcc cccacactc gtacacgccc accaccctc
 120
 gcaggcacac atgcacacac gcgcgcgcac acgcacacac acccccagcc cggaccggcc
 180
 gacctgctcc ccgggggtctc tcccgcaggc aggtctctctc gccgagtctc cgaaaagggg
 240
 cggtcgtggc ggccctggcg cccagctggg caacgcttcg tggatatctca ccgtttctct
 300
 ctgttggtgcc cagcgccccg actgaagatc cggatcttca gtccctggcg cgc
 353

<210> 1790
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 1790
 Met His Thr Pro Ser Thr Tyr Ser His Thr Gln Thr Cys His Thr Pro
 1 5 10 15
 Pro Ser Pro His Thr Arg Thr Arg Pro Pro Pro Leu Ala Gly Thr His
 20 25 30
 Ala His Thr Arg Ala His Thr His Thr His Pro Gln Pro Gly Pro Ala

```

          35          40          45
Asp Leu Leu Pro Gly Val Ser Pro Ala Gly Arg Ser Pro Arg Arg Val
   50          55          60
Ser Glu Lys Gly Arg Ser Trp Arg Pro Trp Arg Pro Ala Gly Gln Arg
   65          70          75          80
Phe Val Val Ser His Arg Phe Ser Leu Leu Cys Pro Ala Pro Arg Leu
          85          90          95
Lys Ile Arg Ile Phe Ser Pro Trp Arg
          100          105

```

<210> 1791

<211> 355

<212> DNA

<213> Homo sapiens

<400> 1791

```

aaatttcagt tagagattag ggaaaataaa gatgttattt tttcccatcc tagtttacag
60
acccccaga aaccactca tggattctcc cgagtctttg gacctggctc agacaccctt
120
gctttggatc aagccaatgc atgtatcccc taacacaccc atgctttatg tggctccctgc
180
ccctccctgc tcaggggact gcttggttaac ttcattgggt tggggacata tatattatag
240
gagagagaca gagaaaaaga aagagaggaa atgttattct ccttgtctgt atctgtatct
300
ccactccgat tccattccc tctgtctctc tctctctct cctcccttca cgcgt
355

```

<210> 1792

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1792

```

Met Leu Phe Phe Pro Ile Leu Val Tyr Arg Pro Pro Arg Asn Pro Leu
  1          5          10          15
Met Asp Ser Pro Glu Ser Leu Asp Leu Ala Gln Thr Pro Leu Leu Trp
          20          25          30
Ile Lys Pro Met His Val Ser Pro Asn Thr Pro Met Leu Tyr Val Val
          35          40          45
Pro Ala Pro Pro Cys Ser Gly Asp Cys Leu Leu Thr Ser Leu Gly Trp
          50          55          60
Gly His Ile Tyr Tyr Arg Arg Glu Thr Glu Lys Lys Lys Glu Arg Lys
   65          70          75          80
Cys Tyr Ser Pro Cys Leu Tyr Leu Tyr Leu His Ser Asp Ser His Ser
          85          90          95
Leu Cys Cys Ser Pro Leu Ser Pro Pro Phe Thr Arg
          100          105

```

<210> 1793

<211> 510

<212> DNA

<213> Homo sapiens

<400> 1793

tgggttccag ccgtagatg accttggcct gggaggcctt ccgaaggcca caccatata
 60
 caccctctcg gagctcctcg cttaccagtc gcccaaagag cttgtcccc cagcagccag
 120
 agtcagccag acccttagca aacaccatag gggtcacatc aatctcttct ccaacttcac
 180
 cttcttctct ggagatgaat cctgacaaca cctcagggct gaggcagaag tcggtggagg
 240
 ccgagccgtg ctcattgtgg atggtgcacc gatacacacc gcagtctacg ggggaggcct
 300
 gcacgatggc caaggccgcc ggccctcat cccctgcgct cctgcccacc tcgcccactg
 360
 ggcgtgatc cttggcccat gtcaagactg agtcactaag aatgttgaaa aactggcacc
 420
 acagcttcag gctaccggag gcacaggaa actgctccac ccgaatcttc cggatcacct
 480
 gtggggcttt cagcaggtct ttggctttcc
 510

<210> 1794

<211> 116

<212> PRT

<213> Homo sapiens

<400> 1794

Met	Thr	Leu	Ala	Trp	Glu	Ala	Phe	Arg	Arg	Pro	His	Pro	Tyr	Pro	Pro
1				5					10					15	
Pro	Arg	Ser	Ser	Ser	Leu	Thr	Ser	Arg	Pro	Lys	Ser	Leu	Ser	Pro	Gln
			20					25					30		
Gln	Pro	Glu	Ser	Ala	Arg	Pro	Leu	Ala	Asn	Thr	Ile	Gly	Val	Ile	Ser
		35					40					45			
Ile	Ser	Ser	Pro	Thr	Ser	Pro	Ser	Ser	Leu	Glu	Met	Asn	Pro	Asp	Asn
	50					55				60					
Thr	Ser	Gly	Leu	Arg	Gln	Lys	Ser	Val	Glu	Ala	Glu	Pro	Cys	Ser	Leu
65					70				75						80
Trp	Met	Val	His	Arg	Tyr	Thr	Pro	Gln	Ser	Thr	Gly	Glu	Ala	Cys	Thr
			85					90						95	
Met	Ala	Lys	Ala	Ala	Gly	Pro	Ser	Ser	Pro	Ala	Leu	Leu	Pro	Thr	Ser
			100					105					110		
Pro	Thr	Gly	Arg												
			115												

<210> 1795

<211> 386

<212> DNA

<213> Homo sapiens

<400> 1795

ctatgctctg agtcacttct ccaagcattc ctttctgttc ttcttccct gggctgatca
 60
 tttcaagaag tcctacattc cagaaaactt gagaggtgct tcttctctgg aagccctttt
 120

tcttttctgt gagctcaggg agcattctac atacctcagc tgtgtctgct atcttttctgt
 180
 taattatcaa tctttccata taaacagtaa aggaccacag tttattcacc agattcccca
 240
 tccaaacctg cacctgcata cataaacgca ctggataaat gtaccgcagt agacagaggg
 300
 tctccagggt gagagctcca tgagggcacc aatttttctc tgtttagctg tgcctcaaaa
 360
 gcaaggaagg gttgatccgg tctaga
 386

<210> 1796

<211> 86

<212> PRT

<213> Homo sapiens

<400> 1796

Met	Gln	Val	Gln	Val	Trp	Met	Gly	Asn	Leu	Met	Asn	Lys	Leu	Trp	Ser
1			5					10					15		
Phe	Thr	Val	Tyr	Met	Glu	Arg	Leu	Ile	Ile	Lys	Gln	Lys	Ile	Ala	Asp
		20					25					30			
Thr	Ala	Glu	Val	Cys	Arg	Met	Leu	Pro	Glu	Leu	Thr	Glu	Lys	Lys	Arg
		35					40				45				
Gly	Phe	Gln	Arg	Arg	Ser	Thr	Ser	Gln	Val	Phe	Trp	Asn	Val	Gly	Leu
	50				55				60						
Leu	Glu	Met	Ile	Ser	Pro	Gly	Lys	Glu	Glu	Gln	Lys	Gly	Met	Leu	Gly
65				70				75						80	
Glu	Val	Thr	Gln	Ser	Ile										
				85											

<210> 1797

<211> 348

<212> DNA

<213> Homo sapiens

<400> 1797

aagcttcact atgttgccca ttccatgggc ggcgtgctgg tgcgtgacct gctggcggac
 60
 cggaatttgc cgatgtcatt gatcaggcca tctgtctggg ctgcgcgcag cagggctcgc
 120
 gtgccgctaa tttgttggcg ccatttgctg ggggcgcacc cgtcaaattgg tgtatcacag
 180
 cgactatgtg atgccgcttg cgccacgcc cggcagcgcg cgttggagcg ccatcaactc
 240
 acagatggac aacctggtgt tgccggtgac ctccgcaatt ttaccgggaa tgacccatgt
 300
 ggcggtggat tacctggggc attgttcgtt attgtacagc ccaacggt
 348

<210> 1798

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1798

```

Met Gly Gly Val Leu Val Arg Asp Leu Leu Ala Asp Arg Asn Leu Pro
 1             5             10             15
Met Ser Leu Ile Arg Ser Ser Val Trp Ala Arg Arg Ser Arg Ala Arg
      20             25             30
Val Pro Leu Ile Cys Trp Arg His Leu Leu Ala Ala His Pro Ser Asn
      35             40             45
Gly Val Ser Gln Arg Leu Cys Asp Ala Ala Cys Ala His Ala Arg Gln
 50             55             60
Arg Ala Leu Glu Arg His Gln Leu Thr Asp Gly Gln Pro Gly Val Ala
65             70             75             80
Gly Asp Leu Gly Asn Phe Thr Gly Asn Asp Pro Cys Gly Gly Gly Leu
      85             90             95
Pro Gly Ala Leu Phe Val Ile Val Gln Pro Thr Arg
      100             105

```

<210> 1799

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1799

```

acgcgtcgcc tcctgctggt cgggattttc cttgctgtag ttaaccaaac caccggcgtc
60
aataccgtca tgtattacgc gcccaagggtg ttggagttcg caggaatgag caccagggcg
120
tcgattatatt cagagggtggc taatggagtc atgtctgtta ttggtgccgc tgcaggcttg
180
tggctcatcg aacgggtttga tcgtcgtcac ctgcttatct tcgatgtcac ggcggtcggt
240
gtgtgtctcc ttggtattgc ggctactttc gggctggcaa ttgctcctca tgtgggtcaa
300
gggggtaccga agtggggcgcc tattctcgtg ctcgtcctga tgagtatctt catgcttacc
360
gtgcac
366

```

<210> 1800

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1800

```

Thr Arg Arg Leu Leu Leu Val Gly Ile Phe Leu Ala Val Val Asn Gln
 1             5             10             15
Thr Thr Gly Val Asn Thr Val Met Tyr Tyr Ala Pro Lys Val Leu Glu
      20             25             30
Phe Ala Gly Met Ser Thr Gln Ala Ser Ile Ile Ser Glu Val Ala Asn
      35             40             45
Gly Val Met Ser Val Ile Gly Ala Ala Ala Gly Leu Trp Leu Ile Glu
 50             55             60
Arg Phe Asp Arg Arg His Leu Leu Ile Phe Asp Val Thr Ala Val Gly
65             70             75             80
Val Cys Leu Leu Gly Ile Ala Ala Thr Phe Gly Leu Ala Ile Ala Pro

```

```
<210> 1801
<211> 597
<212> DNA
<213> Homo sapiens
```

```
<210> 1802
<211> 199
<212> PRT
<213> Homo sapiens
```

1402


```

      115              120              125
Ser Ala Val Arg Ala Lys Asp Asp Phe Asp Ile Ala Gly Pro Leu Arg
      130              135              140
Ser Leu Asn Ile Asp Thr Gly Ala Gly Leu Glu Arg Ile Ala Tyr Leu
145              150              155              160
Leu Gln Gly Val Asp Asn Met Tyr Glu Thr Asp Gln Val Phe Pro Val
      165              170              175
Ile Glu Lys Ala Ser Glu Met Ser Gly Lys Arg Tyr Gly Val Arg His
      180              185              190
Asp Asp Asp Val Arg Leu Arg
      195

```

<210> 1803

<211> 708

<212> DNA

<213> Homo sapiens

<400> 1803

```

cccacaacga tggccgcat ggtggatggg gaagtgcctg aggaggtcac acctaaggac
60
ctcatcctgg cctcatctc cgagatcggc accggtgggg gacaagggtca tatggtcgag
120
tatcgcggcg aggccatcga gaagatgtcg atggaggggc gcatgacgat ctgcaatatg
180
tcgattgagt ggggagctcg cgtcggcatg gttgcttctg atgagaccac cttcacctac
240
ctcaaggatc gtccgcacgc tccgcgtggt gcacagtggg acaaggctgt cgcgtactgg
300
cgactctgct gtactgacga cgatgcgacc tttgacgctg agatccatgt ggacgcctcg
360
aatctcgccc ccttcgttac ctgggggtacc aaccgggggc agggatcccc ctagggcggg
420
gtggtgccgg ccgtcgaaga ctttgaggac gaggtagctc gcagcgcagc gtttgaggta
480
catggatttg acccgcacga gatcggttcc cggtttgctg acatctttcg caataactct
540
gcgaacaacg gcttggtact ggctcaggtt gatcccaagg tcgtcggaga gttgtgggac
600
tttgccgagc agcatcctgg tgagcagctc accctctccc tcgagaatcg gacgattaac
660
cttcggggtc gcacgaccta cccgttccat attgatgacg tcacgcgt
708

```

<210> 1804

<211> 236

<212> PRT

<213> Homo sapiens

<400> 1804

```

Pro Thr Thr Met Ala Val Met Val Asp Gly Glu Val Pro Glu Glu Val
1              5              10              15
Thr Pro Lys Asp Leu Ile Leu Ala Leu Ile Ser Glu Ile Gly Thr Gly
      20              25              30
Gly Gly Gln Gly His Met Val Glu Tyr Arg Gly Glu Ala Ile Glu Lys

```

		35					40					45				
Met	Ser	Met	Glu	Gly	Arg	Met	Thr	Ile	Cys	Asn	Met	Ser	Ile	Glu	Trp	
	50					55					60					
Gly	Ala	Arg	Val	Gly	Met	Val	Ala	Ser	Asp	Glu	Thr	Thr	Phe	Thr	Tyr	
65					70					75					80	
Leu	Lys	Asp	Arg	Pro	His	Ala	Pro	Arg	Gly	Ala	Gln	Trp	Asp	Lys	Ala	
				85					90					95		
Val	Ala	Tyr	Trp	Arg	Thr	Leu	Arg	Thr	Asp	Asp	Asp	Ala	Thr	Phe	Asp	
			100					105					110			
Ala	Glu	Ile	His	Val	Asp	Ala	Ser	Asn	Leu	Ala	Pro	Phe	Val	Thr	Trp	
		115					120					125				
Gly	Thr	Asn	Pro	Gly	Gln	Gly	Ser	Pro	Leu	Gly	Gly	Val	Val	Pro	Ala	
	130					135					140					
Val	Glu	Asp	Phe	Glu	Asp	Glu	Val	Ala	Arg	Ser	Ala	Ala	Phe	Gly	Val	
145					150					155					160	
His	Gly	Phe	Asp	Pro	Asp	Glu	Ile	Gly	Ser	Arg	Phe	Ala	Asp	Ile	Phe	
			165						170					175		
Arg	Asn	Asn	Ser	Ala	Asn	Asn	Gly	Leu	Leu	Leu	Ala	Gln	Val	Asp	Pro	
			180					185					190			
Lys	Val	Val	Gly	Glu	Leu	Trp	Asp	Phe	Ala	Glu	Gln	His	Pro	Gly	Glu	
		195					200					205				
Gln	Leu	Thr	Leu	Ser	Leu	Glu	Asn	Arg	Thr	Ile	Asn	Leu	Pro	Gly	Arg	
	210					215					220					
Thr	Thr	Tyr	Pro	Phe	His	Ile	Asp	Asp	Val	Thr	Arg					
225					230						235					

<210> 1805

<211> 833

<212> DNA

<213> Homo sapiens

<400> 1805

nccgcagtggt tgtgggacaa gaacaccggt gagccggttt ataacgccat cgtgtggcag
60

gacacgcgca ctcaaaagat ctgtaacgaa ctagctgggtg acaaggggcgc cgaccgctac
120

aaggagatct gtggtctggg cctgtcgacc tattttctctg gcccgaaagg t caaatggatt
180

cttcgacaacg ttgagggagc ccgtgcgagg gccgaggccg gcgatctgct cttcggtaac
240

atggacactt ggggtgctgtg gaacctgact ggcgggtacta acggtggcgt gcacatcac
300

gatccgacca acgcgtcccg aaccatgctc atggacgtcc gaaagctgca gtgggacgac
360

tcgatgtgcg aggtcatggg aattccaaag tccatgcttc ctgagatcaa gtcctcctcc
420

gagatctacg gctatggtcg caagaacggc ctgctgacg ataccccgat ctccggcatt
480

cttggcgatc agcaggccgc cacctttggc caggcttgc tccaaaagg catggcgaag
540

aacacgtacg gcaccggctg cttcatgctc atgaacacag gtgaggaggc catcttctcc
600

gagaacgggtc tgctgaccac cgtctgctac aagatttggtg accagcccac cgtctatgcc
660

ctggaagggtt cgatcgccgt cgctggatcg ctggtacagt ggctgcgcga caacctcaag
 720
 atgttcgaga ccgccccgca aatcgaagcc ctcgccaaca ccgtcgagga caatggtggc
 780
 gcctactttg tgccggcett ctctggcctg ttcgcgccgt actggcgctcc gga
 833

<210> 1806

<211> 277

<212> PRT

<213> Homo sapiens

<400> 1806

Xaa	Ala	Val	Val	Trp	Asp	Lys	Asn	Thr	Gly	Glu	Pro	Val	Tyr	Asn	Ala
1				5					10					15	
Ile	Val	Trp	Gln	Asp	Thr	Arg	Thr	Gln	Lys	Ile	Cys	Asn	Glu	Leu	Ala
			20					25					30		
Gly	Asp	Lys	Gly	Ala	Asp	Arg	Tyr	Lys	Glu	Ile	Cys	Gly	Leu	Gly	Leu
		35					40					45			
Ser	Thr	Tyr	Phe	Ser	Gly	Pro	Lys	Val	Lys	Trp	Ile	Leu	Asp	Asn	Val
	50					55					60				
Glu	Gly	Ala	Arg	Ala	Arg	Ala	Glu	Ala	Gly	Asp	Leu	Leu	Phe	Gly	Asn
65					70					75					80
Met	Asp	Thr	Trp	Val	Leu	Trp	Asn	Leu	Thr	Gly	Gly	Thr	Asn	Gly	Gly
				85						90				95	
Val	His	Ile	Thr	Asp	Pro	Thr	Asn	Ala	Ser	Arg	Thr	Met	Leu	Met	Asp
			100					105					110		
Val	Arg	Lys	Leu	Gln	Trp	Asp	Asp	Ser	Met	Cys	Glu	Val	Met	Gly	Ile
		115					120					125			
Pro	Lys	Ser	Met	Leu	Pro	Glu	Ile	Lys	Ser	Ser	Ser	Glu	Ile	Tyr	Gly
						135						140			
Tyr	Gly	Arg	Lys	Asn	Gly	Leu	Leu	Ile	Asp	Thr	Pro	Ile	Ser	Gly	Ile
145					150					155					160
Leu	Gly	Asp	Gln	Gln	Ala	Ala	Thr	Phe	Gly	Gln	Ala	Cys	Phe	Gln	Lys
				165					170					175	
Gly	Met	Ala	Lys	Asn	Thr	Tyr	Gly	Thr	Gly	Cys	Phe	Met	Leu	Met	Asn
			180					185					190		
Thr	Gly	Glu	Glu	Ala	Ile	Phe	Ser	Glu	Asn	Gly	Leu	Leu	Thr	Thr	Val
		195					200						205		
Cys	Tyr	Lys	Ile	Gly	Asp	Gln	Pro	Thr	Val	Tyr	Ala	Leu	Glu	Gly	Ser
		210				215					220				
Ile	Ala	Val	Ala	Gly	Ser	Leu	Val	Gln	Trp	Leu	Arg	Asp	Asn	Leu	Lys
225					230					235				240	
Met	Phe	Glu	Thr	Ala	Pro	Gln	Ile	Glu	Ala	Leu	Ala	Asn	Thr	Val	Glu
				245				250						255	
Asp	Asn	Gly	Gly	Ala	Tyr	Phe	Val	Pro	Ala	Phe	Ser	Gly	Leu	Phe	Ala
			260					265					270		
Pro	Tyr	Trp	Arg	Pro											
			275												

<210> 1807

<211> 420

<212> DNA

<213> Homo sapiens

<400> 1807

nnntatcggc aaggtggtcg aaatggctct tgactatgtc aacggtgaca cgtgcgccgc
 60
 gaccgccccca ttcatttgtc gtttgacgtc gacgcgatgg accctagcgt ggccccgagc
 120
 acaggcacac cgggtgcgtgg tggcttcaca ttccgagaag gccactacat atgcgagggc
 180
 gtagctgaga ccggctcgtt ggtggctatg gatatggtag aagtcaaccc ccatcttgaa
 240
 aagcatgcgg ctgagcagac gatcgccgtg ggttggtccc tcattcggtc ggcgctgggg
 300
 gagacgcttc tgtaatgggt gcatgatggg ccggtgggtcc atagccatgc atagacactc
 360
 cgggcgctga tatgatgagt gacatagcac gtacgataaa tctcggtttt gagcacgcgt
 420

<210> 1808

<211> 88

<212> PRT

<213> Homo sapiens

<400> 1808

His	Val	Arg	Arg	Asp	Arg	Pro	Ile	His	Leu	Ser	Phe	Asp	Val	Asp	Ala
1				5					10					15	
Met	Asp	Pro	Ser	Val	Ala	Pro	Ser	Thr	Gly	Thr	Pro	Val	Arg	Gly	Gly
			20					25					30		
Leu	Thr	Phe	Arg	Glu	Gly	His	Tyr	Ile	Cys	Glu	Ala	Val	Ala	Glu	Thr
		35				40						45			
Gly	Ser	Leu	Val	Ala	Met	Asp	Met	Val	Glu	Val	Asn	Pro	His	Leu	Glu
	50					55					60				
Lys	His	Ala	Ala	Glu	Gln	Thr	Ile	Ala	Val	Gly	Cys	Ser	Leu	Ile	Arg
65					70					75					80
Ser	Ala	Leu	Gly	Glu	Thr	Leu	Leu								
							85								

<210> 1809

<211> 340

<212> DNA

<213> Homo sapiens

<400> 1809

nnaccggtga tcgcatcggt gagcctcggc gcgatgcgcg tgttcgacct tcgccatcgc
 60
 cagaccggtg tcacgcatgc gtatcgccctc gggcatggca gcctcctcgt gatgcggggc
 120
 cccacccagg ccgaatggca gcatcgcggt ccgaaagcgc cgggtgtgca gggcgagcgc
 180
 gtgaacctga cgtttcggcg cgtgatgccg gtcggtatgg gccggtaaca accggcgctc
 240
 ccgaggtgcc cggatcgccg ggcgattcgc gcccgtttt cgcgattcat gcgcgacga
 300
 tacgggcagg cggtcgcatg tgcggcacgt tgccgcacgn
 340

<210> 1810
 <211> 75
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Xaa Pro Val Ile Ala Ser Val Ser Leu Gly Ala Met Arg Val Phe Asp
 1 5 10 15
 Leu Arg His Arg Gln Thr Gly Val Thr His Ala Tyr Arg Leu Gly His
 20 25 30
 Gly Ser Leu Leu Val Met Arg Gly Pro Thr Gln Ala Glu Trp Gln His
 35 40 45
 Arg Val Pro Lys Ala Pro Gly Val Gln Gly Glu Arg Val Asn Leu Thr
 50 55 60
 Phe Arg Arg Val Met Pro Val Gly Met Gly Arg
 65 70 75

<210> 1811
 <211> 500
 <212> DNA
 <213> Homo sapiens

<400> 1811
 nnacgcgtgc taggaatagc catggactca tcatcagata catgctggat ttataacttca
 60
 ctgggtggat tgtatgagct gctcgtaaaa gatgaggctc gcgatatgtg gcatttgttg
 120
 ctgaaacggt gcgactttga gaaggcacta acattttgtc gtgatgagac gtgtcgggaag
 180
 caggtactgg aaaagaaggc cgatgcactg ctacacgcag gtcagctcat ggaggccgtc
 240
 gagtgcctatg ctcaggccca gacaccggcc tttgaacagg ttgtgcttcc tttgatggac
 300
 gtctgtgccg acaaggcatt gcgtcgatat gtcagactgc gtctcgacaa gatgccgaaa
 360
 caagctcgcg tgectcgtct catgctggct acttggtcca ttgaattgta tgtggccgcc
 420
 attcaagcgc atgaaccac ctccgaacat tatcagacac ttttgctgga agcccaggag
 480
 acacttgagc ggcacatga
 500

<210> 1812
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 1812
 Xaa Arg Val Leu Gly Ile Ala Met Asp Ser Ser Ser Asp Thr Cys Trp
 1 5 10 15
 Ile Tyr Thr Ser Leu Gly Gly Leu Tyr Glu Leu Leu Val Lys Asp Glu
 20 25 30
 Ala Arg Asp Met Trp His Leu Leu Leu Lys Arg Cys Asp Phe Glu Lys

```

      35              40              45
Ala Leu Thr Phe Cys Arg Asp Glu Thr Cys Arg Lys Gln Val Leu Glu
  50              55              60
Lys Lys Gly Asp Ala Leu Leu His Ala Gly Gln Leu Met Glu Ala Val
  65              70              75              80
Glu Cys Tyr Ala Gln Ala Gln Thr Pro Ala Phe Glu Gln Val Val Leu
      85              90              95
Ser Leu Met Asp Val Cys Ala Asp Lys Ala Leu Arg Arg Tyr Val Arg
      100              105              110
Leu Arg Leu Asp Lys Met Pro Lys Gln Ala Arg Val Pro Arg Leu Met
      115              120              125
Leu Ala Thr Trp Leu Ile Glu Leu Tyr Val Ala Ala Ile Gln Ala His
      130              135              140
Glu Pro Thr Ser Glu His Tyr Gln Thr Leu Leu Leu Glu Ala Gln Glu
  145              150              155              160
Thr Leu Glu Arg His His
      165

```

<210> 1813

<211> 426

<212> DNA

<213> Homo sapiens

<400> 1813

```

tctagagccg ttgtgatcgg tatccatggt tggatggggg tcatctcgat ggaggagtgt
  60
gtcctgaggg gtggcagtga cctggtaggg gtgcctgcgg cgtcgcggct tgcgatcgct
  120
ggttctcggg gatgactctc ggatgaatat agatctgcta agacgtcatt agattcgctt
  180
ggcgcttggt tgggaacggg tgtgaagcag ccttctgatg gatgtatttt tgcgttggtg
  240
aataaggttt caatattaat tgaatatggc gctagatgct ggtttaggat cagttgacgt
  300
ccgctgtaga tcctccctat ggtcattctg gggccaggcg cttcgccagc tggccatcgc
  360
aacaatggtg tggcgaaggg ttatgaggtg agtatggctg agcaagtcgt tggacaggcg
  420
tctaca
  426

```

<210> 1814

<211> 108

<212> PRT

<213> Homo sapiens

<400> 1814

```

Met Thr Ile Gly Arg Ile Tyr Ser Gly Arg Gln Leu Ile Leu Asn Gln
  1              5              10              15
His Leu Ala Pro Tyr Ser Ile Asn Ile Glu Thr Leu Phe Asn Asn Ala
      20              25              30
Lys Ile His Pro Ser Glu Gly Cys Phe Thr Pro Val Pro Asn Gln Ala
      35              40              45
Pro Ser Glu Ser Asn Asp Val Leu Ala Asp Leu Tyr Ser Ser Glu Ser

```

```

      50              55              60
His Pro Arg Glu Pro Ala Ile Ala Ser Arg Asp Ala Ala Gly Thr Pro
65              70              75              80
Thr Arg Ser Leu Pro Pro Leu Arg Thr His Ser Ser Ile Glu Met Asn
      85              90              95
Pro Ile Gln Pro Trp Ile Pro Ile Thr Thr Ala Leu
      100              105

```

<210> 1815

<211> 303

<212> DNA

<213> Homo sapiens

<400> 1815

```

ggcgcccaca tggctacgct cgcaccgcgg cacaaggtaa gccgtagcgg cgggatcgag
60

```

```

cgccaggccg cgcattctcg catggagcgc gatcagttcg gccatcatcg cgtcgtcggg
120

```

```

cgtgccgatc tcgaggggca acgccgcgcc gagccgcgaa gccagatcgg gcagcgcgat
180

```

```

ccgccagcca tcggcaaatt cgcgagtgat gacgagcaag ggccgcctgg tctcctgcgc
240

```

```

ccggttccag cagtggaaca cgttcgctc gggcagacgg gcggcatcgg cgatcacggt
300

```

acc

303

<210> 1816

<211> 98

<212> PRT

<213> Homo sapiens

<400> 1816

```

Met Ala Thr Leu Ala Pro Arg His Lys Val Ser Arg Ser Gly Gly Ile
1      5      10      15

```

```

Glu Arg Gln Ala Ala His Leu Gly Met Glu Arg Asp Gln Phe Gly His
      20      25      30

```

```

His Arg Val Val Gly Arg Ala Asp Leu Glu Gly Gln Arg Arg Ala Glu
      35      40      45

```

```

Pro Arg Ser Gln Ile Gly Gln Arg Asp Pro Pro Ala Ile Gly Lys Phe
      50      55      60

```

```

Ala Ser Asp Asp Glu Gln Gly Pro Pro Gly Leu Leu Arg Pro Val Pro
65      70      75      80

```

```

Ala Val Glu His Val Arg Leu Gly Gln Thr Gly Gly Ile Gly Asp His
      85      90      95

```

Gly Thr

<210> 1817

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1817

nncagcttgc aagaccgcgg ccacacagtg tacatcttaa catcacattt cgatgcgtcg
 60
 catgcgtttg agcccacacg cgatggcaca cttcaggtca ttcacgcaaa gacatggatc
 120
 ccgcgctcct tatttcacat gctgcatctg cgatggccat tcgcagcagt tttttctctt
 180
 gtgatgcagg tcgtggtagc agcgtatgga tcgtcactcg cacgccactt gccgcatgtg
 240
 tacagggcgt gacgcatgtc ccgtcaaact cgctcccaga cgtgtttgtt attgaccaac
 300
 ttccagcagc gataccccta atcaaactcc tgtgtgggcg gcgtgtcatg tactactgtc
 360
 acttcctga caaagaaatc agcgtgctc tggctcgaca gcgaggcacg cgt
 413

<210> 1818

<211> 83

<212> PRT

<213> Homo sapiens

<400> 1818

Xaa	Ser	Leu	Gln	Asp	Arg	Gly	His	Thr	Val	Tyr	Ile	Leu	Thr	Ser	His
1				5					10					15	
Phe	Asp	Ala	Ser	His	Ala	Phe	Glu	Pro	Thr	Arg	Asp	Gly	Thr	Leu	Gln
			20					25					30		
Val	Ile	His	Ala	Lys	Thr	Trp	Ile	Pro	Arg	Ser	Leu	Phe	His	Met	Leu
		35					40					45			
His	Leu	Arg	Trp	Pro	Phe	Ala	Ala	Val	Phe	Ser	Leu	Val	Met	Gln	Val
	50					55					60				
Val	Val	Ala	Ala	Tyr	Gly	Ser	Ser	Leu	Ala	Arg	His	Leu	Pro	His	Val
65					70					75				80	
Tyr	Arg	Ala													

<210> 1819

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1819

ggatccaaga gtggggcatc aggaacatgc catggttgtc gtggtgctgg aatgagaaca
 60
 atcacaagac agataggcct tggcatgac caacagatga aactgtttg ccctgaatgc
 120
 aaaggatcag gtgagatcat aagtgacaag gacaaatgcc caagctgtaa aggaaacaaa
 180
 gtagtccagg agaagaaggt gttagagggt catgtggaga aaggaatgca acataaccaa
 240
 aagattgtat tccagggcca ggctgatgaa gctcctgata cgggtacagg agacattgtt
 300
 tttgtcttgc aacttaaaga ccatccaaaa tttaagagga tgt
 343

<210> 1820

<211> 114
 <212> PRT
 <213> Homo sapiens

<400> 1820
 Gly Ser Lys Ser Gly Ala Ser Gly Thr Cys His Gly Cys Arg Gly Ala
 1 5 10 15
 Gly Met Arg Thr Ile Thr Arg Gln Ile Gly Leu Gly Met Ile Gln Gln
 20 25 30
 Met Asn Thr Val Cys Pro Glu Cys Lys Gly Ser Gly Glu Ile Ile Ser
 35 40 45
 Asp Lys Asp Lys Cys Pro Ser Cys Lys Gly Asn Lys Val Val Gln Glu
 50 55 60
 Lys Lys Val Leu Glu Val His Val Glu Lys Gly Met Gln His Asn Gln
 65 70 75 80
 Lys Ile Val Phe Gln Gly Gln Ala Asp Glu Ala Pro Asp Thr Gly Thr
 85 90 95
 Gly Asp Ile Val Phe Val Leu Gln Leu Lys Asp His Pro Lys Phe Lys
 100 105 110
 Arg Met

<210> 1821
 <211> 285
 <212> DNA
 <213> Homo sapiens

<400> 1821
 aagcttgagt tcagcaagat ctggagggtt attaaggcaa acttcaacga caagttcgat
 60
 gaggtcggga agaagtgggg aggtggcatc atgggatcca agtcgcaggc caagaccaag
 120
 gcccggaagaa agttgctcgc caaggaggcc gcccgagcga tgacctagat tgtctactgc
 180
 tgtgtctgcc ctgtagtttg acggggaaga actgatgaac tcgtattgtg gttttccgaa
 240
 tctagtttca tatgtttctg tccaccagac catgtttaga agctt
 285

<210> 1822
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 1822
 Lys Leu Glu Phe Ser Lys Ile Leu Glu Ala Ile Lys Ala Asn Phe Asn
 1 5 10 15
 Asp Lys Phe Asp Glu Val Gly Lys Lys Trp Gly Gly Gly Ile Met Gly
 20 25 30
 Ser Lys Ser Gln Ala Lys Thr Lys Ala Arg Glu Lys Leu Leu Ala Lys
 35 40 45
 Glu Ala Ala Gln Arg Met Thr
 50 55

<210> 1823
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1823
 ngttggctgc tgttgctggg cgttctgtcc ctgacgggct gcgcccggtc cgatgcgctg
 60
 tggggcgctgg tcgataagct ctgcatggcc aactatcagc aaaagcgcgga tccggccccg
 120
 tgtgagcaga tttatatgcc gcagggtaaa gcgcagggct ttagcgtgct gcaaaacccg
 180
 cgttatccct atcatttcat tctggtgccg acggcgccgc tttccggcat tgaaagcccg
 240
 ctgctgctgg ccggagagcg aacggactat tttggctatg catggctgat gcgttaccgg
 300
 ctggccgccg agtatggcgg gccggtgccg gacgacaggc tgggcatggc gatcaactcc
 360
 gcttacggcc gcagccagaa ccaattg
 387

<210> 1824
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1824
 Xaa Trp Leu Leu Leu Leu Gly Val Leu Ser Leu Thr Gly Cys Ala Arg
 1 5 10 15
 Ser Asp Ala Leu Trp Gly Val Val Asp Lys Leu Cys Met Ala Asn Tyr
 20 25 30
 Gln Gln Lys Arg Asp Pro Ala Pro Cys Glu Gln Ile Tyr Met Pro Gln
 35 40 45
 Gly Lys Ala Gln Gly Phe Ser Val Leu Gln Asn Pro Arg Tyr Pro Tyr
 50 55 60
 His Phe Ile Leu Val Pro Thr Ala Pro Leu Ser Gly Ile Glu Ser Pro
 65 70 75 80
 Leu Leu Leu Ala Gly Glu Arg Thr Asp Tyr Phe Gly Tyr Ala Trp Leu
 85 90 95
 Met Arg Tyr Arg Leu Ala Ala Glu Tyr Gly Gly Pro Val Pro Asp Asp
 100 105 110
 Arg Leu Gly Met Ala Ile Asn Ser Ala Tyr Gly Arg Ser Gln Asn Gln
 115 120 125
 Leu

<210> 1825
 <211> 413
 <212> DNA
 <213> Homo sapiens

<400> 1825
 gtgcacggac gaccgcgcac agggactcgt gtgccgcgca tgggacgacg gcgatgcgtg
 60

tgcgtgcata ccgctgctct ggcaggctcgt gcgtgctgatt gtcgccgaca catcggcggc
 120
 ttggcacgtc gtgattgggc gcctaggcac catgtcgcag gccgacatgg acatgtgggc
 180
 gtcgtgcctc gatacgcgcg acccttcctg ctctcgggtg gccttggtg cctggagcgc
 240
 gatgcctggc ctacgggcac gcgatgcac ggtggtctac ctgtcggaca tgccgctggg
 300
 tctggcctca ggtgcgtggc cgatccgcgt gcctcgcctc gcgttatgtg tctgccggcg
 360
 cctatgccat tcatctcgtg cagctacgtc acctggctga tctcgacgcg gct
 413

<210> 1826

<211> 124

<212> PRT

<213> Homo sapiens

<400> 1826

Met	Gly	Arg	Arg	Arg	Cys	Val	Cys	Val	His	Thr	Ala	Ala	Leu	Ala	Gly
1					5				10					15	
Arg	Ala	Cys	Asp	Cys	Arg	Arg	His	Ile	Gly	Gly	Leu	Ala	Arg	Arg	Asp
			20					25					30		
Trp	Ala	Pro	Arg	His	His	Val	Ala	Gly	Arg	His	Gly	His	Val	Gly	Val
			35				40					45			
Val	Pro	Arg	Tyr	Ala	Arg	Pro	Phe	Leu	Leu	Ser	Val	Gly	Leu	Val	Cys
	50					55				60					
Leu	Glu	Arg	Asp	Ala	Trp	Pro	Thr	Gly	Thr	Arg	Cys	Ile	Gly	Gly	Leu
65					70					75					80
Pro	Val	Gly	His	Ala	Ala	Gly	Ser	Gly	Leu	Arg	Cys	Val	Ala	Asp	Pro
			85						90					95	
Arg	Ala	Ser	Leu	Gly	Val	Met	Cys	Leu	Pro	Ala	Pro	Met	Pro	Phe	Ile
			100						105					110	
Ser	Cys	Ser	Tyr	Val	Thr	Trp	Leu	Ile	Ser	Thr	Arg				
			115					120							

<210> 1827

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1827

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 60
 ctgttcgata cgcgctggt gccggagttc accgacctgt tcggcgaagc cttcgaagcc
 120
 gcctacctgc aggccgaagc gcagggcaag gccaaaccga cgatctctgc ccgcaagctg
 180
 tacgcccga tgatgcgtac gctggccgag accggcaacg gctggatgac cttcaaggac
 240
 aagtgcaacc gcgccagcaa ccagaccctg cgtccgggca acgtgatcca cctgtccaac
 300
 ctgtgcaccg aaatcctgga agtcacttcc aacgatgaaa ccgcg
 345

<210> 1828
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1828
 Leu Ala Asn Trp Val Pro Asp Leu Phe Met Lys Arg Val Glu Ala Asp
 1 5 10 15
 Gln Glu Trp Ser Leu Phe Asp Pro Arg Val Val Pro Glu Phe Thr Asp
 20 25 30
 Leu Phe Gly Glu Ala Phe Glu Ala Ala Tyr Leu Gln Ala Glu Ala Gln
 35 40 45
 Gly Lys Ala Asn Arg Thr Ile Ser Ala Arg Lys Leu Tyr Ala Arg Met
 50 55 60
 Met Arg Thr Leu Ala Glu Thr Gly Asn Gly Trp Met Thr Phe Lys Asp
 65 70 75 80
 Lys Cys Asn Arg Ala Ser Asn Gln Thr Leu Arg Pro Gly Asn Val Ile
 85 90 95
 His Leu Ser Asn Leu Cys Thr Glu Ile Leu Glu Val Thr Ser Asn Asp
 100 105 110
 Glu Thr Ala
 115

<210> 1829
 <211> 4457
 <212> DNA
 <213> Homo sapiens

<400> 1829
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 120
 gaaaccgtga atgccaaga ggattctcaa atgccaagg aaagctcccc agatgatgat
 180
 gttcaacagg tagtatttga cctgatatgt aaagttgtaa gtggcctcga agtggaatct
 240
 gcatcagtta catctcaatt agaaattgaa gctatgcccc caaagtgcag tgatatagat
 300
 ccagatgaag agacgattaa aattgaagat gactccatc gacagagtca gaatgctttg
 360
 ctgagtaatg aaagttctca gtttctgtct gtgtctgcag agggaggcca tgagtgtgtg
 420
 gcaaattggaa tctccaggaa tagctcctca ccttgatatt caggaaccac acacactctt
 480
 catgactctt ctgttgcttc catagaaacc aaatctagac aaaggagtca cagtagtatt
 540
 caattcagct tcaaagaaaa attatcagaa aaagtttcgg agaaggaaac aatagttaag
 600
 gagtcaggta aacaaccagg agcaaaacct aaagtaaaac ttgccagaaa aaaggatgat
 660
 gacaagaaaa aatcttcaaa tgaaaaactc aaacaaacca gtgtattctt cagtgtatgg
 720

ctggatttag agaactggta tagctgtgga gagggagaca tttctgaaat tgagagtgc
 780
 atgggttctc caggatctcg aaaatctccc aatttcaaca ttcacacctc ctatcaacat
 840
 gtgctcctgt atctccagtt gtatgattca tccaggactt tgtatgcttt ctctgccatc
 900
 aaagccatct tgaaaactaa ccttatagct tttgtaaatg ccatttcaac tactagtgtg
 960
 aataatgcac atactcctca gttgtctctc cttcagaatc tattggccag acaccggatt
 1020
 tctgttatgg gcaaagattt ttatagtcac attccagtgg actcaaatca taacttccgg
 1080
 agttctatgt acatagaaat tcttatttct ctctgcttat attacatgcg tagccattac
 1140
 ccaactcatg tcaaggttac tgcacaagat ttaataggca atcgaaacat gcaaatgatg
 1200
 agcatagaaa ttctgacact actcttccact gagctggcaa aagtaataga aagctcagcg
 1260
 aagggtttcc ctagtcttat ttctgatatg ttatctaagt gcaaagttca gaaagtgcg
 1320
 cttcattggt tgctgtcatc tatctttagt gctcagaaat ggcatagtga aaaaatggca
 1380
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 1440
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 1620
 ttgcatgctc agccaatcac atgtcaaggc atgttcctct gtgcagtgat acgagctttg
 1680
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 1740
 ccttacatgg gaaaagttct gcagagagtg gttgtttctg tgacactaca actgtgcaga
 1800
 aatttagata atctaattca gcagtacaaa tacgaaacag gattatctga tagtaggcct
 1860
 ctgtggatgg catcaattat tccaccagat atgattctta ctcttttggg agggattaca
 1920
 gccattatcc attactgttt gttggatcca actacacagt atcaccaact tttggctcag
 1980
 gtagaccaga aacacttggt tgaagcacgc agtggaaatc tctcaatcct tcatatgatc
 2040
 atgtcctctg tgacactgct ttggagcata ctgcatcaag ctgattcttc agaaaagatg
 2100
 actattgccg catccgcac tcttaccact attaactctg gagctacaaa gaacttgaga
 2160
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 2220
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 2280
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 2340

atgagagcag aaactgttat ccagactgta aaagaagttt taaagcagcc accagccata
 2400
 gccaaaggaca agaaacatct ttctttggaa gtctgcatgc ttcagttttt ctatgcttat
 2460
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 2520
 aaagactcta tacaactgag tcttccagct ccagggcagt ttcttatact tgggggttctg
 2580
 aatgagttta ttatgaaaaa ccctagtttg gaaaataaaa aagaccaaag agaccttcag
 2640
 gatgtaactc acaaaatagt ggatgcaatt ggtgcaattg ctgggttcttc tctggaacag
 2700
 acaacatggc tgcgacgaaa tcttgaagtt aagccttctc ccaaataat ggtagatgga
 2760
 accaatttgg aatctgatgt tgaagatatg ttatcacctg caatggaaac cgcaaacata
 2820
 actccttctg tatatagtgt ccatgcattg acattactct ctgagggtttt ggctcatctt
 2880
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 2940
 atgcattatg ttgtgcccta cctcagaaat cacagtgcac ataatgcccc tagttatcga
 3000
 gcttgtgtcc agctgctcag cagtcttagt gggatatcagt acacacggag agcttggaaa
 3060
 aaagaagctt ttgacctctt tatggatccc agtttctttc agatggatgc ctcttgtgtt
 3120
 aatcattgga gagcaattat ggacaatctg atgacacatg ataaaacaac atttagagat
 3180
 ttgatgactc gtgtagcagt ggctcaaagc agttcactta atctctttgc aaacctgat
 3240
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 3300
 gaaattgacc agtaccagaa atatcttcca gatatacaag agagattggt tgagagtctc
 3360
 cgtttgccac aggtgccaac tctccattct caagtgttcc tgtttttcag agtggttactt
 3420
 ttaagaatgt ctccccaaca tcttacctca ctctggccta ccatgattac agaacttgta
 3480
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 3960

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 4080
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 4140
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 4260
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 4320
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<210> 1830

<211> 1377

<212> PRT

<213> Homo sapiens

<400> 1830

Ile	Pro	Met	Val	Val	Ser	Asp	Phe	Asp	Leu	Pro	Asp	Gln	Gln	Ile	Glu
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Ile	Leu	Gln	Ser	Ser	Asp	Ser	Gly	Cys	Ser	Gln	Ser	Ser	Ala	Gly	Asp
		20						25					30		
Asn	Leu	Ser	Tyr	Glu	Val	Asp	Pro	Glu	Thr	Val	Asn	Ala	Gln	Glu	Asp
		35					40					45			
Ser	Gln	Met	Pro	Lys	Glu	Ser	Ser	Pro	Asp	Asp	Asp	Val	Gln	Gln	Val
		50				55				60					
Val	Phe	Asp	Leu	Ile	Cys	Lys	Val	Val	Ser	Gly	Leu	Glu	Val	Glu	Ser
65					70				75					80	
Ala	Ser	Val	Thr	Ser	Gln	Leu	Glu	Ile	Glu	Ala	Met	Pro	Pro	Lys	Cys
			85						90					95	
Ser	Asp	Ile	Asp	Pro	Asp	Glu	Glu	Thr	Ile	Lys	Ile	Glu	Asp	Asp	Ser
			100					105					110		
Ile	Arg	Gln	Ser	Gln	Asn	Ala	Leu	Leu	Ser	Asn	Glu	Ser	Ser	Gln	Phe
		115					120					125			
Leu	Ser	Val	Ser	Ala	Glu	Gly	Gly	His	Glu	Cys	Val	Ala	Asn	Gly	Ile
		130				135					140				
Ser	Arg	Asn	Ser	Ser	Ser	Pro	Cys	Ile	Ser	Gly	Thr	Thr	His	Thr	Leu
145					150				155					160	
His	Asp	Ser	Ser	Val	Ala	Ser	Ile	Glu	Thr	Lys	Ser	Arg	Gln	Arg	Ser
			165					170					175		
His	Ser	Ser	Ile	Gln	Phe	Ser	Phe	Lys	Glu	Lys	Leu	Ser	Glu	Lys	Val
			180					185				190			
Ser	Glu	Lys	Glu	Thr	Ile	Val	Lys	Glu	Ser	Gly	Lys	Gln	Pro	Gly	Ala
		195				200						205			
Lys	Pro	Lys	Val	Lys	Leu	Ala	Arg	Lys	Lys	Asp	Asp	Lys	Lys	Lys	
		210			215					220					
Ser	Ser	Asn	Glu	Lys	Leu	Lys	Gln	Thr	Ser	Val	Phe	Phe	Ser	Asp	Gly

225					230					235					240
Leu	Asp	Leu	Glu	Asn	Trp	Tyr	Ser	Cys	Gly	Glu	Gly	Asp	Ile	Ser	Glu
				245					250					255	
Ile	Glu	Ser	Asp	Met	Gly	Ser	Pro	Gly	Ser	Arg	Lys	Ser	Pro	Asn	Phe
			260					265					270		
Asn	Ile	His	Pro	Leu	Tyr	Gln	His	Val	Leu	Leu	Tyr	Leu	Gln	Leu	Tyr
		275					280					285			
Asp	Ser	Ser	Arg	Thr	Leu	Tyr	Ala	Phe	Ser	Ala	Ile	Lys	Ala	Ile	Leu
	290					295					300				
Lys	Thr	Asn	Pro	Ile	Ala	Phe	Val	Asn	Ala	Ile	Ser	Thr	Thr	Ser	Val
305				310						315					320
Asn	Asn	Ala	Tyr	Thr	Pro	Gln	Leu	Ser	Leu	Leu	Gln	Asn	Leu	Leu	Ala
				325				330						335	
Arg	His	Arg	Ile	Ser	Val	Met	Gly	Lys	Asp	Phe	Tyr	Ser	His	Ile	Pro
			340					345					350		
Val	Asp	Ser	Asn	His	Asn	Phe	Arg	Ser	Ser	Met	Tyr	Ile	Glu	Ile	Leu
	355						360					365			
Ile	Ser	Leu	Cys	Leu	Tyr	Tyr	Met	Arg	Ser	His	Tyr	Pro	Thr	His	Val
	370					375					380				
Lys	Val	Thr	Ala	Gln	Asp	Leu	Ile	Gly	Asn	Arg	Asn	Met	Gln	Met	Met
385				390					395						400
Ser	Ile	Glu	Ile	Leu	Thr	Leu	Leu	Phe	Thr	Glu	Leu	Ala	Lys	Val	Ile
				405					410					415	
Glu	Ser	Ser	Ala	Lys	Gly	Phe	Pro	Ser	Phe	Ile	Ser	Asp	Met	Leu	Ser
			420					425					430		
Lys	Cys	Lys	Val	Gln	Lys	Val	Ile	Leu	His	Cys	Leu	Leu	Ser	Ser	Ile
		435					440					445			
Phe	Ser	Ala	Gln	Lys	Trp	His	Ser	Glu	Lys	Met	Ala	Gly	Lys	Asn	Leu
	450					455					460				
Val	Ala	Val	Glu	Glu	Gly	Phe	Ser	Glu	Asp	Ser	Leu	Ile	Asn	Phe	Ser
465					470				475					480	
Glu	Asp	Glu	Phe	Asp	Asn	Gly	Ser	Thr	Leu	Gln	Ser	Gln	Leu	Leu	Lys
				485					490					495	
Val	Leu	Gln	Arg	Leu	Ile	Val	Leu	Glu	His	Arg	Val	Met	Thr	Ile	Pro
			500					505					510		
Glu	Glu	Asn	Glu	Thr	Gly	Phe	Asp	Phe	Val	Val	Ser	Asp	Leu	Glu	His
		515					520					525			
Ile	Ser	Pro	His	Gln	Pro	Met	Thr	Ser	Leu	Gln	Tyr	Leu	His	Ala	Gln
	530					535					540				
Pro	Ile	Thr	Cys	Gln	Gly	Met	Phe	Leu	Cys	Ala	Val	Ile	Arg	Ala	Leu
545				550						555				560	
His	Gln	His	Cys	Ala	Cys	Lys	Met	His	Pro	Gln	Trp	Ile	Gly	Leu	Ile
				565					570					575	
Thr	Ser	Thr	Leu	Pro	Tyr	Met	Gly	Lys	Val	Leu	Gln	Arg	Val	Val	Val
			580					585					590		
Ser	Val	Thr	Leu	Gln	Leu	Cys	Arg	Asn	Leu	Asp	Asn	Leu	Ile	Gln	Gln
		595					600					605			
Tyr	Lys	Tyr	Glu	Thr	Gly	Leu	Ser	Asp	Ser	Arg	Pro	Leu	Trp	Met	Ala
	610					615					620				
Ser	Ile	Ile	Pro	Pro	Asp	Met	Ile	Leu	Thr	Leu	Glu	Gly	Ile	Thr	
625				630						635				640	
Ala	Ile	Ile	His	Tyr	Cys	Leu	Leu	Asp	Pro	Thr	Thr	Gln	Tyr	His	Gln
				645					650					655	
Leu	Leu	Val	Ser	Val	Asp	Gln	Lys	His	Leu	Phe	Glu	Ala	Arg	Ser	Gly

			660						665						670			
Ile	Leu	Ser	Ile	Leu	His	Met	Ile	Met	Ser	Ser	Val	Thr	Leu	Leu	Trp			
		675					680					685						
Ser	Ile	Leu	His	Gln	Ala	Asp	Ser	Ser	Glu	Lys	Met	Thr	Ile	Ala	Ala			
	690					695					700							
Ser	Ala	Ser	Leu	Thr	Thr	Ile	Asn	Leu	Gly	Ala	Thr	Lys	Asn	Leu	Arg			
705					710					715					720			
Gln	Gln	Ile	Leu	Glu	Leu	Leu	Gly	Pro	Ile	Ser	Met	Asn	His	Gly	Val			
				725				730						735				
His	Phe	Met	Ala	Ala	Ile	Ala	Phe	Val	Trp	Asn	Glu	Arg	Arg	Gln	Asn			
			740				745						750					
Lys	Thr	Thr	Thr	Arg	Thr	Lys	Val	Ile	Pro	Ala	Ala	Ser	Glu	Glu	Gln			
		755					760					765						
Leu	Leu	Leu	Val	Glu	Leu	Val	Arg	Ser	Ile	Ser	Val	Met	Arg	Ala	Glu			
	770					775					780							
Thr	Val	Ile	Gln	Thr	Val	Lys	Glu	Val	Leu	Lys	Gln	Pro	Pro	Ala	Ile			
785					790					795					800			
Ala	Lys	Asp	Lys	Lys	His	Leu	Ser	Leu	Glu	Val	Cys	Met	Leu	Gln	Phe			
				805					810					815				
Phe	Tyr	Ala	Tyr	Ile	Gln	Arg	Ile	Pro	Val	Pro	Asn	Leu	Val	Asp	Ser			
			820					825					830					
Trp	Ala	Ser	Leu	Leu	Ile	Leu	Leu	Lys	Asp	Ser	Ile	Gln	Leu	Ser	Leu			
		835					840						845					
Pro	Ala	Pro	Gly	Gln	Phe	Leu	Ile	Leu	Gly	Val	Leu	Asn	Glu	Phe	Ile			
	850					855					860							
Met	Lys	Asn	Pro	Ser	Leu	Glu	Asn	Lys	Lys	Asp	Gln	Arg	Asp	Leu	Gln			
865					870					875					880			
Asp	Val	Thr	His	Lys	Ile	Val	Asp	Ala	Ile	Gly	Ala	Ile	Ala	Gly	Ser			
			885						890					895				
Ser	Leu	Glu	Gln	Thr	Thr	Trp	Leu	Arg	Arg	Asn	Leu	Glu	Val	Lys	Pro			
			900					905					910					
Ser	Pro	Lys	Ile	Met	Val	Asp	Gly	Thr	Asn	Leu	Glu	Ser	Asp	Val	Glu			
		915					920					925						
Asp	Met	Leu	Ser	Pro	Ala	Met	Glu	Thr	Ala	Asn	Ile	Thr	Pro	Ser	Val			
	930					935					940							
Tyr	Ser	Val	His	Ala	Leu	Thr	Leu	Leu	Ser	Glu	Val	Leu	Ala	His	Leu			
945					950					955					960			
Leu	Asp	Met	Val	Phe	Tyr	Ser	Asp	Glu	Lys	Glu	Arg	Val	Ile	Pro	Leu			
			965						970					975				
Leu	Val	Asn	Ile	Met	His	Tyr	Val	Val	Pro	Tyr	Leu	Arg	Asn	His	Ser			
			980					985					990					
Ala	His	Asn	Ala	Pro	Ser	Tyr	Arg	Ala	Cys	Val	Gln	Leu	Leu	Ser	Ser			
		995					1000											

1090 1095 1100
 Tyr Gln Lys Tyr Leu Pro Asp Ile Gln Glu Arg Leu Val Glu Ser Leu
 1105 1110 1115 1120
 Arg Leu Pro Gln Val Pro Thr Leu His Ser Gln Val Phe Leu Phe Phe
 1125 1130 1135
 Arg Val Leu Leu Leu Arg Met Ser Pro Gln His Leu Thr Ser Leu Trp
 1140 1145 1150
 Pro Thr Met Ile Thr Glu Leu Val Gln Val Phe Leu Leu Met Glu Gln
 1155 1160 1165
 Glu Leu Thr Ala Asp Glu Asp Ile Ser Arg Thr Ser Gly Pro Ser Val
 1170 1175 1180
 Ala Gly Leu Glu Thr Thr Tyr Thr Gly Gly Asn Gly Phe Ser Thr Ser
 1185 1190 1195 1200
 Tyr Asn Ser Gln Arg Trp Leu Asn Leu Tyr Leu Ser Ala Cys Lys Phe
 1205 1210 1215
 Leu Asp Leu Ala Leu Ala Leu Pro Ser Glu Asn Leu Pro Gln Phe Gln
 1220 1225 1230
 Met Tyr Arg Trp Ala Phe Ile Pro Glu Ala Ser Asp Asp Ser Gly Leu
 1235 1240 1245
 Glu Val Arg Arg Gln Gly Ile His Gln Arg Glu Phe Lys Pro Tyr Val
 1250 1255 1260
 Val Arg Leu Ala Lys Leu Leu Arg Lys Arg Ala Lys Lys Asn Pro Glu
 1265 1270 1275 1280
 Glu Asp Asn Ser Gly Arg Thr Leu Gly Trp Glu Pro Gly His Leu Leu
 1285 1290 1295
 Leu Thr Ile Cys Thr Val Arg Ser Met Glu Gln Leu Leu Pro Phe Phe
 1300 1305 1310
 Asn Val Leu Ser Gln Val Phe Asn Ser Lys Val Thr Ser Arg Cys Gly
 1315 1320 1325
 Gly His Ser Gly Ser Pro Ile Leu Tyr Ser Asn Ala Phe Pro Asn Lys
 1330 1335 1340
 Asp Met Lys Leu Glu Asn His Lys Pro Cys Ser Ser Lys Ala Arg Gln
 1345 1350 1355 1360
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 1365 1370 1375
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<210> 1831

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1831

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 120
 atcctggagg ctgcaccttc aggtggcaaa accttttacc tgcgctatca cgacagccac
 180
 ggcaagctgc gccaatgcaa gatcggtgat gctgctgcgg tcagctacga caaggcccgg
 240
 cagaaggcca tgcggttgcg ttggaaggtg gaatgggggg gcaatccatt ggaggagcgc
 300

caagccttgc gtgcggtacc gaccctggcc gagttcatcc gcgagaccta tgtgcccgcac
 360
 atccacctgc accggaggaa ttttcagtcc acgctgagct tcctcaagtg ccatgtcctg
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 508

<210> 1832

<211> 169

<212> PRT

<213> Homo sapiens

<400> 1832

Xaa	His	Glu	Arg	Arg	Gly	Arg	Met	Pro	Ile	Val	Lys	Leu	Ser	Ala	Gln
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Phe	Val	Arg	Glu	Ala	Val	Cys	Pro	Pro	Gly	Lys	Ser	Lys	Val	Asp	Tyr
		20					25					30			
Tyr	Asp	Asn	Ala	Leu	Lys	Gly	Phe	Ile	Leu	Glu	Ala	Arg	Pro	Ser	Gly
		35				40					45				
Gly	Lys	Thr	Phe	Tyr	Leu	Arg	Tyr	His	Asp	Ser	His	Gly	Lys	Leu	Arg
	50				55						60				
Gln	Cys	Lys	Ile	Gly	Asp	Ala	Ala	Ala	Val	Ser	Tyr	Asp	Lys	Ala	Arg
65				70					75					80	
Gln	Lys	Ala	Met	Arg	Leu	Arg	Trp	Lys	Val	Glu	Trp	Gly	Gly	Asn	Pro
			85					90						95	
Leu	Glu	Glu	Arg	Gln	Ala	Leu	Arg	Ala	Val	Pro	Thr	Leu	Ala	Glu	Phe
			100					105						110	
Ile	Arg	Glu	Thr	Tyr	Val	Pro	His	Ile	His	Leu	His	Arg	Arg	Asn	Phe
		115				120						125			
Gln	Ser	Thr	Leu	Ser	Phe	Leu	Lys	Cys	His	Val	Leu	Pro	Arg	Phe	Gly
		130				135					140				
Ala	Lys	His	Leu	Asp	Glu	Ile	Thr	Thr	Asn	Met	Leu	Ala	Glu	Ala	His
145					150				155						160
Gln	Asp	Leu	Arg	Thr	Lys	Gly	Tyr	Ala							
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<210> 1833

<211> 430

<212> DNA

<213> Homo sapiens

<400> 1833

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 120
 ggcgcaaagc ggcgatgac gcgtcgaaca gcgttactcc agccagcggg ccaaccaaca
 180
 gcataccag gttgaaaccg atgatccacg ccgcgatgct ttctcggcgc gggtttggca
 240
 gcggcttggg ctccgcttcc cagcgttccg gcggcggcga gccattttgg aaatcgacga
 300

acatctccgg cgctcctgct gtcaggcgct gaaggtatcg aaagtcatgc gccgtgacaa
 360
 aggaagatcg gcgacacagg agccgaagcg ccgcccctg caataagcgc gcgcgatcgc
 420
 aattgtcggg
 430

<210> 1834
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 1834
 Met Arg Arg Cys Arg Leu Asn Cys Pro Val Pro Arg Gln Thr Met Pro
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 Arg Arg Ala Ala Ala Lys Gly Arg Arg Arg Ser Val Ala Gln Ser Gly
 20 25 30
 Asp Asp Arg Val Glu Gln Arg Tyr Ser Ser Gln Arg Ala Asn Gln Gln
 35 40 45
 His His Gln Val Glu Thr Asp Asp Pro Arg Arg Asp Ala Phe Ser Ala
 50 55 60
 Arg Val Trp Gln Arg Leu Gly Leu Gly Phe Pro Ala Phe Arg Arg Arg
 65 70 75 80
 Pro Ala Ile Leu Glu Ile Asp Glu His Leu Arg Arg Ser Cys Cys Gln
 85 90 95
 Ala Leu Lys Val Ser Lys Val Met Arg Arg Asp Lys Gly Arg Ser Ala
 100 105 110
 Thr Gln Glu Pro Lys Arg Arg Arg Leu Gln
 115 120

<210> 1835
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 1835
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 cccagtggca ccctatgcta ctgtggcacc cagcacttta gccaccccc aggcccaggc
 120
 tctggcccgc cagcaggccc tgcagcatgc acagaccctg gcccatgccc ctcccagac
 180
 gctgcagcac cctcagggtg tcccggcacc ccaggcactg tcccaccctc agagcctcca
 240
 gcagcctcag ggcttgggccc accctcagcc catggcccaa acccagggct tgggtccaccc
 300
 tcaggccctg gctcaccagg gtctccagca cccccacaat cccttgctgc atggaggccg
 360
 gaagatgcca gactcagatg ccccccgaa tgtgaccgtg tctacctcaa ctatccccct
 420
 ttcaatggcg gccactctgc agcacagcca gcctccggac ctgagtagca tcgtgcacca
 480
 gatcaaccag ttttgccaga cgagggcagg catcagcact acctcagtgt gtgagggcca
 540

gatcgccaac cccagcccca ttagtcgcag tctgtctatc aatgcaagca cccgggtgtc
 600
 gaccacagc gtccccacac caatgccttc atgtgtgggc aatcccatgg agcacacca
 660
 cgcggccacc gccgcgg
 677

<210> 1836
 <211> 140
 <212> PRT
 <213> Homo sapiens

<400> 1836
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 1 5 10 15
 His Phe Ser Pro Pro Pro Gly Pro Gly Ser Gly Pro Pro Ala Gly Pro
 20 25 30
 Ala Ala Cys Thr Asp Pro Gly Pro Cys Pro Ser Pro Asp Ala Ala Ala
 35 40 45
 Pro Ser Gly Tyr Pro Ala Thr Pro Gly Thr Val Pro Pro Ser Glu Pro
 50 55 60
 Pro Ala Ala Ser Gly Pro Gly Pro Pro Ser Ala His Gly Pro Asn Pro
 65 70 75 80
 Gly Leu Gly Pro Pro Ser Gly Pro Gly Ser Pro Gly Ser Pro Ala Pro
 85 90 95
 Pro Gln Ser Leu Ala Ala Trp Arg Pro Glu Asp Ala Arg Leu Arg Cys
 100 105 110
 Pro Pro Glu Cys Asp Arg Val Tyr Leu Asn Tyr Pro Pro Phe Asn Gly
 115 120 125
 Gly His Ser Ala Ala Gln Pro Ala Ser Gly Pro Glu
 130 135 140

<210> 1837
 <211> 564
 <212> DNA
 <213> Homo sapiens

<400> 1837
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 acggctgata tcaatatcac tgggttttct tcacagtatt taccgcccc ctatggacca
 120
 attgctgcgg acgtcaaaca aacctgggag tgggaccac aggatctgac gattgtctca
 180
 acttctgctg atcacgacca taacctccga tatgcagtac agcatttcgg cgcaagcccg
 240
 accccgatcc agtaaccttc gataacgcga aagccggcac cccacataac tcgngtgtac
 300
 accgaagtcc ctgccaaagt tccatccgac ataggggagt taactaacg aattatcaag
 360
 gggaaatcta cccccgtaac caaggccatc gcgattcaaa actgggttcg tgacagcgct
 420
 cgattccatt acgacatcaa cgcaccgaa ggtgacggct atcaggtact ggaaaacttc
 480

ctgctgcaca cccaccgagg ttattgcac ctttcgagg cgtcaatggc actcatggca
 540
 cgacttgaag gtattccgac acgc
 564

<210> 1838
 <211> 84
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Xaa Leu Glu His Ser Ala Pro Glu Ser Val Pro Gly Leu Phe Gly Pro
 1 5 10 15
 Ser Arg Thr Arg Thr Val Asp Ile Asn Ile Thr Gly Phe Ser Ser Gln
 20 25 30
 Tyr Leu Pro Ala Pro Tyr Gly Pro Ile Ala Ala Asp Val Lys Gln Thr
 35 40 45
 Trp Ala Trp Asp Pro Gln Asp Leu Thr Ile Val Ser Thr Ser Ala Asp
 50 55 60
 His Asp His Asn Leu Arg Tyr Ala Val Gln His Phe Gly Ala Ser Pro
 65 70 75 80
 Thr Pro Ile Gln

<210> 1839
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 1839
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 gaagttcagg caaaggctta tcaggcgggtg ctggacgctg cagatgcggc atttaaggca
 120
 gccgttcttg gcaataaatt ccgcgacgac catgctgcag cgatgaatgt tctcgctcc
 180
 cgccttgagg actgggggct tatgccgggc agcgcgaagg tcgctctttc ggacgagggc
 240
 gggcaacacc gtcgttgat gccgcacggc accagccacc atctagggtt ggatgtgcac
 300

<210> 1840
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Xaa Ile Arg Leu Asn Thr Ala Asp Ile Thr Arg Thr Phe Pro Val Asn
 1 5 10 15
 Gly Lys Phe Ser Glu Val Gln Ala Lys Ala Tyr Gln Ala Val Leu Asp
 20 25 30
 Ala Ala Asp Ala Ala Phe Lys Ala Ala Val Pro Gly Asn Lys Phe Arg
 35 40 45
 Asp Val His Ala Ala Ala Met Asn Val Leu Ala Ser Arg Leu Glu Asp

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      50              55              60
Trp Gly Leu Met Pro Val Ser Ala Lys Val Ala Leu Ser Asp Glu Gly
65              70              75              80
Gly Gln His Arg Arg Trp Met Pro His Gly Thr Ser His His Leu Gly
              85              90              95
Leu Asp Val His
              100

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<210> 1841
 <211> 330
 <212> DNA
 <213> Homo sapiens

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<400> 1841
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gtcgatccgg tggtcgagat cggcgggtccc ggtacgctag cccaatcgat ggtcgccccg
120
cgcgtcggcg cccatgtcgc cttgatcggc gtgcttnacg gggattgtcg ggcggtgagg
180
acggcgctgc tgatgagcaa gaatctgcgc gtgcaagggc tgccgggtcgg cagccgcgcg
240
cagcaactcg cgatgatcgc gggggtcgag gcgaacggca tccgtccgat cctcgaccag
300
catttccgc tcgaaaatct ccccgacgcg
330

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<210> 1842
 <211> 110
 <212> PRT
 <213> Homo sapiens

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<400> 1842
Xaa Ser Lys Asn Val Pro Glu Trp Gly Pro Arg Ala Leu Glu Leu Pro
1              5              10              15
Gly Gly Pro Gly Val Asp Pro Val Val Glu Ile Gly Gly Pro Gly Thr
              20              25              30
Leu Ala Gln Ser Met Val Ala Pro Arg Val Gly Ala His Val Ala Leu
              35              40              45
Ile Gly Val Leu Xaa Gly Asp Cys Arg Ala Val Arg Thr Ala Leu Leu
              50              55              60
Met Ser Lys Asn Leu Arg Val Gln Gly Leu Pro Val Gly Ser Arg Ala
65              70              75              80
Gln Gln Leu Ala Met Ile Ala Gly Val Glu Ala Asn Gly Ile Arg Pro
              85              90              95
Ile Leu Asp Gln His Phe Pro Leu Glu Asn Leu Pro Asp Ala
              100              105              110

```

<210> 1843
 <211> 473
 <212> DNA
 <213> Homo sapiens

<400> 1843

aagctttggc atctccagca aaagatgtgc tatttactga taccatcacc atgaaggcca
60
acagttttga gtccagatta acaccaagca ggttcatgaa agccttaagt tatgcatcat
120
tagataaaga agattttattg agtcctatta atcaaaatac cctgcaacga tcttctcag
180
tgcgggtccat ggtgtccagt gccacatatg ggggttcaga tgattacatt ggtcttgctc
240
tcccgggtgga tataaatgat atattccagg taaaggatat tccctatttt cagacaaaaa
300
acataccacc acatgatgat cgagggtgcaa gagcatttgc ccatgatgca ggagggtcttc
360
catctggaac tggagggtctt gtaaaaaatt cttttcactt gctacgacag cagatgagtc
420
ttacggaaat aatgaattca atccattcag atgcctctcn cnnccnccccc ccc
473

<210> 1844

<211> 141

<212> PRT

<213> Homo sapiens

<400> 1844

Met	Lys	Ala	Asn	Ser	Phe	Glu	Ser	Arg	Leu	Thr	Pro	Ser	Arg	Phe	Met
1				5					10					15	
Lys	Ala	Leu	Ser	Tyr	Ala	Ser	Leu	Asp	Lys	Glu	Asp	Leu	Leu	Ser	Pro
			20					25					30		
Ile	Asn	Gln	Asn	Thr	Leu	Gln	Arg	Ser	Ser	Ser	Val	Arg	Ser	Met	Val
			35				40					45			
Ser	Ser	Ala	Thr	Tyr	Gly	Gly	Ser	Asp	Asp	Tyr	Ile	Gly	Leu	Ala	Leu
		50				55					60				
Pro	Val	Asp	Ile	Asn	Asp	Ile	Phe	Gln	Val	Lys	Asp	Ile	Pro	Tyr	Phe
65					70				75					80	
Gln	Thr	Lys	Asn	Ile	Pro	Pro	His	Asp	Asp	Arg	Gly	Ala	Arg	Ala	Phe
			85					90					95		
Ala	His	Asp	Ala	Gly	Gly	Leu	Pro	Ser	Gly	Thr	Gly	Gly	Leu	Val	Lys
			100				105						110		
Asn	Ser	Phe	His	Leu	Leu	Arg	Gln	Gln	Met	Ser	Leu	Thr	Glu	Ile	Met
		115				120					125				
Asn	Ser	Ile	His	Ser	Asp	Ala	Ser	Xaa	Xaa	Xaa	Xaa	Pro			
		130				135					140				

<210> 1845

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1845

aagcttacga cgcctagctt tggagacctg aaccacttga tcagtgaac aatgagtggg
60
gtgacttget gcctccgett cccggggcag ctcaactcgg accttcggaa acttgacgtg
120
aacctgattc cattccctcg cctgcacttt tttatggctg gctttgcgcc actcacctcg
180

cgtggctccc agcagtaccg tgctctcact gtccttgagc tgaccagca gatgtgggac
 240
 tccaagaaca tgatgtgtgc tgctgacccg cgctcatggcc gctacctcac agtatctgcc
 300
 atgttccgtg gaaagatgag caccaaggag gtggacgagc agatgctgaa cgtgcagaac
 360
 aagaactctt cctacttcgt ggagtggatc
 390

<210> 1846

<211> 130

<212> PRT

<213> Homo sapiens

<400> 1846

Lys	Leu	Thr	Thr	Pro	Ser	Phe	Gly	Asp	Leu	Asn	His	Leu	Ile	Ser	Ala
1				5					10					15	
Thr	Met	Ser	Gly	Val	Thr	Cys	Cys	Leu	Arg	Phe	Pro	Gly	Gln	Leu	Asn
			20					25					30		
Ser	Asp	Leu	Arg	Lys	Leu	Ala	Val	Asn	Leu	Ile	Pro	Phe	Pro	Arg	Leu
			35				40					45			
His	Phe	Phe	Met	Val	Gly	Phe	Ala	Pro	Leu	Thr	Ser	Arg	Gly	Ser	Gln
	50					55					60				
Gln	Tyr	Arg	Ala	Leu	Thr	Val	Pro	Glu	Leu	Thr	Gln	Gln	Met	Trp	Asp
65				70					75					80	
Ser	Lys	Asn	Met	Met	Cys	Ala	Ala	Asp	Pro	Arg	His	Gly	Arg	Tyr	Leu
			85					90						95	
Thr	Val	Ser	Ala	Met	Phe	Arg	Gly	Lys	Met	Ser	Thr	Lys	Glu	Val	Asp
			100					105					110		
Glu	Gln	Met	Leu	Asn	Val	Gln	Asn	Lys	Asn	Ser	Ser	Tyr	Phe	Val	Glu
			115				120						125		
Trp	Ile														
	130														

<210> 1847

<211> 343

<212> DNA

<213> Homo sapiens

<400> 1847

cagccgtgct ttctgcgtc aactcgggaa cggtatatc ggcagatcc aacagttcca
 60
 tggctcgaag agtagtaaaa atatcaataa ctggcagagc atcgcgtcaa gctggcgacc
 120
 ctggccgcgc ccgcgttggc cgatcacgcc atgttggagc aggccttcca gctgttccag
 180
 caaaaaagtt gcggacaatc tctgcccga tggctcgggtg ttcgacttca gggagcgcga
 240
 tgcactgcac tacgtcgtct atgacctgga gccgctgggt caggcggccc tggcgggcaa
 300
 gccctaacgg tggcaactgg ctgacttaca ccgccccac cgn
 343

<210> 1848

<211> 94
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Met Ala Arg Arg Val Val Lys Ile Ser Ile Thr Gly Arg Ala Ser Arg
 1 5 10 15
 Gln Ala Gly Asp Pro Gly Arg Arg Arg Val Gly Arg Ser Arg His Val
 20 25 30
 Gly Ala Gly Leu Pro Ala Val Pro Ala Lys Lys Leu Arg Thr Ile Ser
 35 40 45
 Cys Arg Met Ala Arg Cys Ser Thr Ser Gly Ser Ala Met His Cys Thr
 50 55 60
 Thr Ser Ser Met Thr Trp Ser Arg Trp Phe Arg Arg Pro Trp Arg Ala
 65 70 75 80
 Ser Pro Asn Gly Gly Asn Trp Leu Thr Tyr Thr Ala Pro Thr
 85 90

<210> 1849
 <211> 390
 <212> DNA
 <213> Homo sapiens

<400> 1849
 cggaagaac aggttcagca aagagcaata gaatgttccc gggctctcag tgcgattctt
 60
 gacattgaac atggagaccc aaaagagaat gtactagggt cagcttttga catgaaacag
 120
 ctgaaggatg ctattgatga gactaaaata gctttgatgg gacattcttt tggaggagca
 180
 acagttcttc aagcccttag tgaggaccag agattcagat gtggagttgc tcttgatcca
 240
 tggatgtatc cggatgaacga agagctgtac tccagaaccc tccagcctct cctctttatc
 300
 aactctgcca aattccagac tccaaaggac atcgcaaaaa tgaaaaagtt ctaccagcct
 360
 gacaaggaaa ggaaanatga ttacaatcaa
 390

<210> 1850
 <211> 130
 <212> PRT
 <213> Homo sapiens

<400> 1850
 Arg Lys Glu Gln Val Gln Gln Arg Ala Ile Glu Cys Ser Arg Ala Leu
 1 5 10 15
 Ser Ala Ile Leu Asp Ile Glu His Gly Asp Pro Lys Glu Asn Val Leu
 20 25 30
 Gly Ser Ala Phe Asp Met Lys Gln Leu Lys Asp Ala Ile Asp Glu Thr
 35 40 45
 Lys Ile Ala Leu Met Gly His Ser Phe Gly Gly Ala Thr Val Leu Gln
 50 55 60
 Ala Leu Ser Glu Asp Gln Arg Phe Arg Cys Gly Val Ala Leu Asp Pro

```

65              70              75              80
Trp Met Tyr Pro Val Asn Glu Glu Leu Tyr Ser Arg Thr Leu Gln Pro
              85              90              95
Leu Leu Phe Ile Asn Ser Ala Lys Phe Gln Thr Pro Lys Asp Ile Ala
              100             105             110
Lys Met Lys Lys Phe Tyr Gln Pro Asp Lys Glu Arg Lys Xaa Asp Tyr
              115             120             125
Asn Gln
      130

```

<210> 1851
 <211> 574
 <212> DNA
 <213> Homo sapiens

```

<400> 1851
ncgatcggag aggcctttccg cactgggtgac ttggactcta agcccgaccc cagccggagc
60
ttcaggcctt accgagctga agacaatgat tcctatgcct ctgagatcaa ggagctgcag
120
ctggtgctgg ctgaggccca cgacagcctc cggggcttgc aagagcagct ctcccaggag
180
cggcagctac gaaaggagga ggccgacaat ttcaaccaga aaatgggtcca gctgaaggag
240
gaccagcaga gggcgctcct gaggcgggag tttgagctgc agagtctgag cctccagcgg
300
aggctggagc agaaattctg gagccaggag aagaacatgc tgggtgcagga gtcccagcaa
360
ttcaagcaca acttctctgt gctcttcatg aagctcaggt ggttctctcaa gcgctggcgg
420
cagggcaagg ttttgcccag cgaaggggat gacttcctcg aggtgaacag catgaaggac
480
ctgtacttgc tgatggagga agacgagata aacgctcagc attctgataa caaggcctgc
540
acggggggaca gctggaccca gaacacgccc aatg
574

```

<210> 1852
 <211> 191
 <212> PRT
 <213> Homo sapiens

```

<400> 1852
Xaa Ile Gly Glu Ala Phe Arg Thr Gly Asp Leu Asp Ser Lys Pro Asp
1              5              10              15
Pro Ser Arg Ser Phe Arg Pro Tyr Arg Ala Glu Asp Asn Asp Ser Tyr
              20              25              30
Ala Ser Glu Ile Lys Glu Leu Gln Leu Val Leu Ala Glu Ala His Asp
              35              40              45
Ser Leu Arg Gly Leu Gln Glu Leu Ser Gln Glu Arg Gln Leu Arg
              50              55              60
Lys Glu Glu Ala Asp Asn Phe Asn Gln Lys Met Val Gln Leu Lys Glu
65              70              75              80
Asp Gln Gln Arg Ala Leu Leu Arg Arg Glu Phe Glu Leu Gln Ser Leu

```

			85					90						95	
Ser	Leu	Gln	Arg	Arg	Leu	Glu	Gln	Lys	Phe	Trp	Ser	Gln	Glu	Lys	Asn
			100					105						110	
Met	Leu	Val	Gln	Glu	Ser	Gln	Gln	Phe	Lys	His	Asn	Phe	Leu	Leu	Leu
			115					120						125	
Phe	Met	Lys	Leu	Arg	Trp	Phe	Leu	Lys	Arg	Trp	Arg	Gln	Gly	Lys	Val
			130					135						140	
Leu	Pro	Ser	Glu	Gly	Asp	Asp	Phe	Leu	Glu	Val	Asn	Ser	Met	Lys	Asp
145						150					155				160
Leu	Tyr	Leu	Leu	Met	Glu	Glu	Asp	Glu	Ile	Asn	Ala	Gln	His	Ser	Asp
				165						170					175
Asn	Lys	Ala	Cys	Thr	Gly	Asp	Ser	Trp	Thr	Gln	Asn	Thr	Pro	Asn	
			180					185						190	

<210> 1853

<211> 338

<212> DNA

<213> Homo sapiens

<400> 1853

```

gccggcgccg accaagccac ggcattgcccc accacattg gaagaggtgt cgttcgcga
60
cgtcattgag gagcgcgccg tcgaagctga cttgttcgtc cgctcgctca atacactcga
120
gctcgcgacg ggcattggcac ttctgcgcac ctgcaccac atggatggca aggtcggcac
180
gacgttttac ctggatgacg atgtcatttt tgcgcgcga cagaagcagc gtcagccga
240
gggccagcga ctgaatacag agcccgcttc tttggccgag ttgctcgagc gcgctgctgc
300
atagaataca tataccaag ctatgatgat gccgtcgt
338

```

<210> 1854

<211> 100

<212> PRT

<213> Homo sapiens

<400> 1854

Met	Pro	His	Pro	Pro	Trp	Lys	Arg	Cys	Arg	Ser	Ala	Thr	Ser	Leu	Arg
1				5					10					15	
Ser	Ala	Pro	Ser	Lys	Leu	Thr	Cys	Ser	Ser	Ala	Arg	Ser	Ile	His	Ser
			20					25					30		
Ser	Leu	Arg	Arg	Ala	Trp	His	Phe	Cys	Ala	Ser	Arg	Thr	Thr	Trp	Met
			35				40					45			
Ala	Arg	Ser	Ala	Arg	Arg	Phe	Thr	Trp	Met	Thr	Met	Ser	Phe	Leu	Ser
			50			55				60					
Arg	His	Arg	Ser	Ser	Ala	Gln	Pro	Arg	Ala	Ser	Asp	Ser	Asn	Thr	Ser
65					70				75					80	
Pro	Ser	Leu	Trp	Pro	Ser	Cys	Ser	Ser	Ala	Leu	Leu	His	Arg	Ile	His
				85					90					95	
Ile	Pro	Lys	Leu												
			100												

<210> 1855
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 1855
 gcgtccttcg cgtacgtgga cgagggcggg caggtgttcg tccagtgcag caccagcac
 60
 ccgagcgaaa cgcaggaaat cgtggcgcac gtccctggacc tggacaacca cgagggtcacg
 120
 gtgcagtgct tgcgcatggg cggtggcttt ggcggttaagg aaatgcagcc gcacgggttc
 180
 gccgcgatcg cagcactcgg cgcgaccctg accgggcgac cggttcgact gcgactgacc
 240
 cgaaaccagg acatcaccat ctccggaaag cgccacccat acctcgcgga gtgggacgtg
 300
 gccttcgacg acgacggccg cctccaggct ctgcgcgcca ccgtcaccag cgacggcggg
 360
 tggagcctgg acctctcgga gccggtgatg cagcggacgg tgtgtcacat cgataactcc
 420
 tattggatc
 429

<210> 1856
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Ala Ser Phe Ala Tyr Val Asp Glu Gly Gly Gln Val Phe Val Gln Cys
 1 5 10 15
 Ser Thr Gln His Pro Ser Glu Thr Gln Glu Ile Val Ala His Val Leu
 20 25 30
 Asp Leu Asp Asn His Glu Val Thr Val Gln Cys Leu Arg Met Gly Gly
 35 40 45
 Gly Phe Gly Gly Lys Glu Met Gln Pro His Gly Phe Ala Ala Ile Ala
 50 55 60
 Ala Leu Gly Ala Thr Leu Thr Gly Arg Pro Val Arg Leu Arg Leu Thr
 65 70 75 80
 Arg Asn Gln Asp Ile Thr Ile Ser Gly Lys Arg His Pro Tyr Leu Ala
 85 90 95
 Glu Trp Asp Val Ala Phe Asp Asp Asp Gly Arg Leu Gln Ala Leu Arg
 100 105 110
 Ala Thr Val Thr Ser Asp Gly Gly Trp Ser Leu Asp Leu Ser Glu Pro
 115 120 125
 Val Met Gln Arg Thr Val Cys His Ile Asp Asn Ser Tyr Trp Ile
 130 135 140

<210> 1857
 <211> 393
 <212> DNA
 <213> Homo sapiens

<400> 1857

gtgcacgccg ctgccccagc cgtcgcctac cgatcaacag acgcagccgc cgtgcgttga
 60
 gataccagcc gagcacgata atgctcagca tggtcagcag cagccagaac ggaaatcgca
 120
 gcaggcgctc gaacagctca ctgccaccca gcaccagcgg gattgccccg gccacgacca
 180
 gtgcgcgcgag gagcagccac catcgcccgc tcatgctgcg gcactcgata ccaatacggt
 240
 gcgcttcaac caatcgatct tggtcgaggc atgccgccca tcttccaaca ggcgagtcac
 300
 cagactcagc cagtaacacc gcgaaaaatc gtggcgcgatg tcgacagggg gcaaaccgag
 360
 acgcagcacg ggtgcctgtc ggtggcgggc gag
 393

<210> 1858

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1858

Met	Leu	Ser	Met	Val	Ser	Ser	Ser	Gln	Asn	Gly	Asn	Arg	Ser	Arg	Arg
1				5					10					15	
Ser	Asn	Ser	Ser	Leu	Pro	Pro	Ser	Thr	Ser	Gly	Ile	Ala	Pro	Ala	Thr
				20				25					30		
Thr	Ser	Ala	Pro	Arg	Ser	Ser	His	His	Arg	Pro	Leu	Met	Leu	Arg	His
				35			40					45			
Ser	Ile	Pro	Ile	Arg	Cys	Ala	Ser	Thr	Asn	Arg	Ser	Trp	Ser	Arg	His
				50		55				60					
Ala	Ala	His	Leu	Pro	Thr	Gly	Glu	Ser	Pro	Asp	Ser	Ala	Ser	Asn	Thr
65					70					75				80	
Ala	Lys	Asn	Arg	Gly	Ala	Cys	Arg	Gln	Gly	Ala	Asn	Arg	Asp	Ala	Ala
				85					90					95	
Arg	Val	Pro	Val	Gly	Gly	Gly	Arg								
				100											

<210> 1859

<211> 345

<212> DNA

<213> Homo sapiens

<400> 1859

nagatctggc gcctcgctcac caacttctct tacttccgca agatggattt ggattttctg
 60
 ttccacatgt tttttctcgc acgatactgc aagcttctgg aggagaactc atttagagga
 120
 agaactgccg acttttttta catgctcttg tttggtgcta ctgtcctaac tagcattggt
 180
 ctgatcgagg ggatgatacc ttacatttcc gagacatttg ccagaattct gttcctgagc
 240
 aattcattga cgtttatgat ggtttatgtc tggagcaagc acaatcctat catccatatg
 300
 agcaatctgg gcctgttcac ctttacgggt gcatacttac catgg
 345

<210> 1860
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1860
 Xaa Ile Trp Arg Leu Val Thr Asn Phe Leu Tyr Phe Arg Lys Met Asp
 1 5 10 15
 Leu Asp Phe Leu Phe His Met Phe Phe Leu Ala Arg Tyr Cys Lys Leu
 20 25 30
 Leu Glu Glu Asn Ser Phe Arg Gly Arg Thr Ala Asp Phe Phe Tyr Met
 35 40 45
 Leu Leu Phe Gly Ala Thr Val Leu Thr Ser Ile Val Leu Ile Gly Gly
 50 55 60
 Met Ile Pro Tyr Ile Ser Glu Thr Phe Ala Arg Ile Leu Phe Leu Ser
 65 70 75 80
 Asn Ser Leu Thr Phe Met Met Val Tyr Val Trp Ser Lys His Asn Pro
 85 90 95
 Ile Ile His Met Ser Asn Leu Gly Leu Phe Thr Phe Thr Ala Ala Tyr
 100 105 110
 Leu Pro Trp
 115

<210> 1861
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 1861
 gcgttgactg tagtgagtga cgaagctgat atacaaaatg cgccgggctg tagaaaagcc
 60
 aatagtgagc ttcattcagt cggcttaggt gttatgaact tacatggcta tcttgctaaa
 120
 aacaaaattg gctatgagtc ggaagaagct aaagattttg ctaatatatt ctttatgatg
 180
 atgaattact attcacttga aagatcaatg caaatagcaa aagaaagaca ggaaacgttt
 240
 aaagactttg ataagtcaga ttatgcaa at ggaaaatatt tcgaatttta tacttcgcaa
 300
 tcatttgaac cgaaatacga aaaagtacgt aaattatttg atggttttaga aatcccaacg
 360
 cctgaagatt ggaaagcatt gcaaaaagaa gttgaaactc acggttttatt ccatgcttat
 420
 cgtttagcga ttgca
 435

<210> 1862
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1862
 Ala Leu Thr Val Val Ser Asp Glu Ala Asp Ile Gln Asn Ala Pro Gly

```

      1             5             10             15
Val Arg Lys Ala Asn Ser Glu Leu His Ser Val Gly Leu Gly Val Met
      20             25             30
Asn Leu His Gly Tyr Leu Ala Lys Asn Lys Ile Gly Tyr Glu Ser Glu
      35             40             45
Glu Ala Lys Asp Phe Ala Asn Ile Phe Phe Met Met Met Asn Tyr Tyr
      50             55             60
Ser Leu Glu Arg Ser Met Gln Ile Ala Lys Glu Arg Gln Glu Thr Phe
      65             70             75             80
Lys Asp Phe Asp Lys Ser Asp Tyr Ala Asn Gly Lys Tyr Phe Glu Phe
      85             90             95
Tyr Thr Ser Gln Ser Phe Glu Pro Lys Tyr Glu Lys Val Arg Lys Leu
      100            105            110
Phe Asp Gly Leu Glu Ile Pro Thr Pro Glu Asp Trp Lys Ala Leu Gln
      115            120            125
Lys Glu Val Glu Thr His Gly Leu Phe His Ala Tyr Arg Leu Ala Ile
      130            135            140
Ala
145

```

<210> 1863

<211> 792

<212> DNA

<213> Homo sapiens

<400> 1863

```

nggatcctca cgccccccat catacgtggg atatcggtga gcaaatgcgt catgacgggg
60
tctccgtcgt gctcactacc cacaacatgg atgaggctca acggctgggt gatcacgtct
120
ggatcgctga tcgcggcagg gtcgcaactc atggaactgt gccagagctc accgctgagt
180
cgagtttgga agatgtgttc ctcactcaca ctagtgaccg cgcagcaggg aggaattgac
240
atgacgacac tcgatctccg ccccgcacct caggccgcac cggctgctgc acgctgctg
300
aaccacgctc tcaccgaggt gcgtctggtg atgcgcaacg gtgagcagct gctactagct
360
ctcgctcatt ccacgggat catcgctgcc gggcgcttcc tgggcggccg ggtcggactg
420
acgatggacg tcttagcacc ctcaagtgtg gcgctcgcca tctggctgac atgtttcact
480
tcccaagcga tcatgaccgg ttttgaacgc cgttacgggg tgcctgaacg attgtccgca
540
accccgtagt gtcggctggg tctgctagct ggcaaggcga tggcttattc cgttatcagt
600
ctcgctcagg tgatactgct tgtcatcatc tcttttagcg tgggtgggca cccccacggt
660
tcgggcctgg cctggctccc aaccctggtg agcgttgtgc tcgccatgat gacattcggg
720
ctcgcagcac tggcaatggc cggcgctggc aaagctgaag tcaactctcg actggccaac
780
ttggtataca tc
792

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<210> 1864
 <211> 264
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Xaa Ile Leu Thr Pro Ala Ile Ile Arg Gly Ile Ser Leu Ser Lys Cys
 1 5 10 15
 Val Met Thr Gly Ser Pro Ser Cys Ser Leu Pro Thr Thr Trp Met Arg
 20 25 30
 Leu Asn Gly Trp Leu Ile Thr Ser Gly Ser Ser Ile Ala Ala Gly Ser
 35 40 45
 Gln Leu Met Glu Leu Cys Gln Ser Ser Pro Leu Ser Arg Val Trp Lys
 50 55 60
 Met Cys Ser Ser Leu Thr Leu Val Thr Ala Gln Gln Gly Gly Ile Asp
 65 70 75 80
 Met Thr Thr Leu Asp Leu Arg Pro Ala Pro Gln Ala Ala Pro Ala Ala
 85 90 95
 Ala Arg Val Arg Asn His Ala Leu Thr Glu Val Arg Leu Val Met Arg
 100 105 110
 Asn Gly Glu Gln Leu Leu Leu Ala Leu Val Ile Pro Ile Gly Ile Ile
 115 120 125
 Val Ala Gly Arg Phe Leu Gly Gly Arg Val Gly Leu Thr Met Asp Val
 130 135 140
 Leu Ala Pro Ser Val Leu Ala Leu Ala Ile Trp Ser Thr Cys Phe Thr
 145 150 155 160
 Ser Gln Ala Ile Met Thr Gly Phe Glu Arg Arg Tyr Gly Val Leu Glu
 165 170 175
 Arg Leu Ser Ala Thr Pro Leu Gly Arg Ser Gly Leu Leu Ala Gly Lys
 180 185 190
 Ala Met Ala Tyr Ser Val Ile Ser Leu Ala Gln Val Ile Leu Leu Val
 195 200 205
 Ile Ile Ser Leu Ala Leu Gly Trp His Pro His Gly Ser Gly Leu Ala
 210 215 220
 Trp Leu Pro Thr Leu Val Ser Val Val Leu Ala Met Met Thr Phe Gly
 225 230 235 240
 Leu Ala Ala Leu Ala Met Ala Gly Ala Gly Lys Ala Glu Val Thr Leu
 245 250 255
 Gly Leu Ala Asn Leu Val Tyr Ile
 260

<210> 1865
 <211> 717
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ngccggctga tcaaacaact cacagacatg ggcttcccga gagagccagc tgaggaggcc
 60
 ttgaagagta acaatatgaa tcttgatcag gccatgagcg ctctgctgga aaagaagggtg
 120
 gacgtggaca agcgtgggct gggagtgacc gaccataatg gaatggccgc caagcccctc
 180

ggctgccgcc cgccaatctc caaagagtct tccgtggacc gccccaccct tcttgacaag
 240
 gatggcggcc tcgtggaaga gccacgcct tcaccgttct tgccttcccc aagcctgaag
 300
 ctcccccttt cacacagtgc actccccagt caggccctgg gtgggggttg ctcggggctg
 360
 ggcattgcaaa acttgaattc ttctagacag ataccgagtg gcaatctggg tatgtttggc
 420
 aatagtggag cagcacaagc caggaccatg cagcagccgc cacagccacc agtcgagcct
 480
 cttaactctt ccagcccag tctccgtgct caagtgcctc agtttctatc cctcaggtt
 540
 caagcacagc ttttgagtt tgcagcaaaa aacattggtc tcaaccctgc actattaacc
 600
 tcgccaatta atcctcaaca tatgacgatg ttgaaccagc tctatcagct gcagctggca
 660
 taccaacgtt taaaaatcca gcagcagatg ttacaggccc agcgtaatgt gtccgga
 717

<210> 1866

<211> 239

<212> PRT

<213> Homo sapiens

<400> 1866

Xaa	Arg	Leu	Ile	Lys	Gln	Leu	Thr	Asp	Met	Gly	Phe	Pro	Arg	Glu	Pro
1				5					10					15	
Ala	Glu	Glu	Ala	Leu	Lys	Ser	Asn	Asn	Met	Asn	Leu	Asp	Gln	Ala	Met
			20					25					30		
Ser	Ala	Leu	Leu	Glu	Lys	Lys	Val	Asp	Val	Asp	Lys	Arg	Gly	Leu	Gly
		35					40					45			
Val	Thr	Asp	His	Asn	Gly	Met	Ala	Ala	Lys	Pro	Leu	Gly	Cys	Arg	Pro
	50				55						60				
Pro	Ile	Ser	Lys	Glu	Ser	Ser	Val	Asp	Arg	Pro	Thr	Leu	Leu	Asp	Lys
65				70					75					80	
Asp	Gly	Gly	Leu	Val	Glu	Glu	Pro	Thr	Pro	Ser	Pro	Phe	Leu	Pro	Ser
			85					90					95		
Pro	Ser	Leu	Lys	Leu	Pro	Leu	Ser	His	Ser	Ala	Leu	Pro	Ser	Gln	Ala
		100					105						110		
Leu	Gly	Gly	Val	Ala	Ser	Gly	Leu	Gly	Met	Gln	Asn	Leu	Asn	Ser	Ser
	115					120						125			
Arg	Gln	Ile	Pro	Ser	Gly	Asn	Leu	Gly	Met	Phe	Gly	Asn	Ser	Gly	Ala
	130				135					140					
Ala	Gln	Ala	Arg	Thr	Met	Gln	Gln	Pro	Pro	Gln	Pro	Pro	Val	Gln	Pro
145				150					155					160	
Leu	Asn	Ser	Ser	Gln	Pro	Ser	Leu	Arg	Ala	Gln	Val	Pro	Gln	Phe	Leu
		165					170						175		
Ser	Pro	Gln	Val	Gln	Ala	Gln	Leu	Leu	Gln	Phe	Ala	Ala	Lys	Asn	Ile
	180					185							190		
Gly	Leu	Asn	Pro	Ala	Leu	Leu	Thr	Ser	Pro	Ile	Asn	Pro	Gln	His	Met
	195					200						205			
Thr	Met	Leu	Asn	Gln	Leu	Tyr	Gln	Leu	Gln	Leu	Ala	Tyr	Gln	Arg	Leu
	210				215						220				
Gln	Ile	Gln	Gln	Gln	Met	Leu	Gln	Ala	Gln	Arg	Asn	Val	Ser	Gly	

225

230

235

<210> 1867

<211> 518

<212> DNA

<213> Homo sapiens

<400> 1867

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nnggggcacg gttagggcca gtgggcagag gggtagggga tatgcaggac cttccactgt
60
tccatgcatg ggacggcact tgggtccgcg atcaggtagc caggcatgga aggaacatgg
120
gaggaaggga actgtctggt gcgccagtgt tgttcaagga ggatgtgaca agacaggcca
180
tctggttggc tggccctggt acccaacaac gtggtggcca aggccttggt cccggagagg
240
ttcttggggg ccagcagggg gctacatagg acatgggtgg ggaccccagc tccgagccca
300
cctctcctgc ctccaccct tccaccnng cagccccgc ctctccgca gaactctccc
360
caagccagac cgcttgacc ggctgcttaa gtcaggcttt gggacatacc ctgggaggaa
420
gcgaggtgct ttgcaccccc aagtgatcat gttcccgtag ccagcctgcc aaggatgatg
480
ggagcttggg gagcgggggc tggcagggct tttccgga
518

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<210> 1868

<211> 73

<212> PRT

<213> Homo sapiens

<400> 1868

```

Gln Asp Arg Pro Ser Gly Trp Leu Ala Leu Leu Pro Asn Asn Val Val
1      5      10      15
Ala Lys Ala Leu Cys Pro Glu Arg Phe Leu Gly Ala Ser Arg Gly Leu
20     25     30
His Arg Thr Trp Val Gly Thr Pro Ala Pro Ser Pro Pro Leu Leu Pro
35     40     45
Pro Pro Leu Pro Pro Xaa Gln Pro Pro Pro Leu Pro Gln Asn Ser Pro
50     55     60
Gln Ala Arg Pro Pro Gly Pro Ala Ala
65     70

```

<210> 1869

<211> 436

<212> DNA

<213> Homo sapiens

<400> 1869

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acgcgtcacc ttctgctgg agctactggg agccctcgga cacctgcgtg cattgcccga
60
ccgtgacatg ccgagcaccc aaaccacact gtggattcgc gagctgagcc gcatcgaccg
120

```

cgacgtgtcg actgccaccc actttcgttg gagcgacgac ggcaccgtgc taggtcagac
 180
 gaccgacgat ggcaccgagc ctgaggttgt tgccctgcc a gcggtctact gccgtcgttg
 240
 cggccgcagc ggatggggag tccagctcgc cagcaccggc aataacctca gcgagaacaa
 300
 cgacagcatc cgacggaccc acgcggcaca cgacggctgc ttccgagcct tgctttcggc
 360
 ccctcgagag ggagccagcg cggtcgacac cggcgaggcg acactgtcct tacgctgggt
 420
 cgacaccgtc aacagg
 436

<210> 1870

<211> 123

<212> PRT

<213> Homo sapiens

<400> 1870

Met	Pro	Ser	Thr	Glu	Thr	His	Leu	Trp	Ile	Arg	Glu	Leu	Ser	Arg	Ile
1				5					10					15	
Asp	Arg	Asp	Val	Ser	Thr	Ala	Thr	His	Phe	Arg	Trp	Ser	Asp	Asp	Gly
			20					25					30		
Thr	Val	Leu	Gly	Gln	Thr	Thr	Asp	Asp	Gly	Thr	Glu	Pro	Glu	Val	Val
		35					40				45				
Ala	Leu	Pro	Ala	Val	Tyr	Cys	Arg	Arg	Cys	Gly	Arg	Ser	Gly	Trp	Gly
	50					55					60				
Val	Gln	Leu	Ala	Ser	Thr	Gly	Asn	Asn	Leu	Ser	Glu	Asn	Asn	Asp	Ser
65					70					75				80	
Ile	Arg	Arg	Thr	His	Ala	Ala	His	Asp	Gly	Arg	Phe	Arg	Ala	Leu	Leu
				85					90					95	
Ser	Ala	Pro	Arg	Glu	Gly	Ala	Ser	Ala	Val	Asp	Thr	Gly	Glu	Ala	Thr
			100					105					110		
Leu	Ser	Leu	Arg	Trp	Phe	Asp	Thr	Val	Asn	Arg					
		115					120								

<210> 1871

<211> 474

<212> DNA

<213> Homo sapiens

<400> 1871

nntgcagcgc cccgaggtcg atgtctccaa cgtctttgcc agccttgaca tggctagcga
 60
 gcccgacctc gtccgtaccc tgctgaggca agcccaacaa tgaccgggga acagctcgcg
 120
 cattggatcg aggagtcgac gtcgacgggtg tttttcggcg gcgccggaat gtccaccgaa
 180
 tcaggtattc cggactttcg ctccgctggc gggctttaca ccactcagca tgacctgccc
 240
 ttccccgcgg agtacatgct cagtcacagc tgtttggttg agcatcccgc ggagttcttc
 300
 gacttetacc gcacctacct catccatcct caggccaggc ccaatgctgg tcacgtgcg
 360

ttggttgccct tggagcaggc tggggaactt tgcacgatca ttaccagaa tattgacggc
 420
 ctgcaccaag aagctggggtc tgcgcagggtc attgagttgc atgggtcggt gcac
 474

<210> 1872
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1872
 Met Thr Gly Glu Gln Leu Ala His Trp Ile Glu Glu Ser Thr Ser Thr
 1 5 10 15
 Val Phe Phe Gly Gly Ala Gly Met Ser Thr Glu Ser Gly Ile Pro Asp
 20 25 30
 Phe Arg Ser Ala Gly Gly Leu Tyr Thr Thr Gln His Asp Leu Pro Phe
 35 40 45
 Pro Ala Glu Tyr Met Leu Ser His Ser Cys Leu Val Glu His Pro Ala
 50 55 60
 Glu Phe Phe Asp Phe Tyr Arg Thr Tyr Leu Ile His Pro Gln Ala Arg
 65 70 75 80
 Pro Asn Ala Gly His Arg Ala Leu Val Ala Leu Glu Gln Ala Gly Glu
 85 90 95
 Leu Ser Thr Ile Ile Thr Gln Asn Ile Asp Gly Leu His Gln Glu Ala
 100 105 110
 Gly Ser Arg Gln Val Ile Glu Leu His Gly Ser Val His
 115 120 125

<210> 1873
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 1873
 nacgcgtaga aatgaagccc cagctgggtca gagaccggaa atccggtagt gcacgggacg
 60
 ggttccctcg gggatctcgg aggggagacc cccaccgggg aggactggag gcagcgccctc
 120
 tcccgccccg gcgcgcgcag cctatttccc tctttccaag gggccaatcc ccaccggggc
 180
 ccgcaggggg cgcgctcaag gcaagggtccg cggcgagaaac ggtgcccagt gggagcgaag
 240
 ggcgaggcca gcccttggtc cttggcgggc agttcgggtc ccgcctccaa attttagtat
 300
 gcatatgagt caccaggaaa gttttttgaa acaaattt
 338

<210> 1874
 <211> 93
 <212> PRT
 <213> Homo sapiens

<400> 1874
 Ser Pro Ser Trp Ser Glu Thr Gly Asn Pro Val Val His Gly Thr Gly

```

      1           5           10           15
Ser Leu Gly Asp Leu Gly Gly Glu Thr Pro Thr Arg Glu Asp Trp Arg
      20           25           30
Gln Arg Leu Ser Arg Pro Gly Ala Arg Ser Leu Phe Pro Ser Phe Gln
      35           40           45
Gly Ala Asn Pro His Arg Gly Pro Gln Gly Ala Arg Ser Arg Gln Gly
      50           55           60
Pro Arg Arg Glu Arg Cys Pro Val Gly Ala Lys Gly Glu Ala Ser Pro
      65           70           75           80
Trp Ser Leu Ala Gly Ser Ser Gly Pro Ala Ser Lys Phe
      85           90

```

<210> 1875

<211> 366

<212> DNA

<213> Homo sapiens

<400> 1875

```

aagcttggcg tacaagtggc tcgtcggttc tcaggtggcg gagccgtgta tcacgatatg
60
ggcaatatct gcttctgctt cattacagaa gatgatggcg atagcttccg tgattttgga
120
aaattcacag aaccctgat tgaagcactc cataaaatgg gagcaacagg ggcagagtta
180
caaggacgta acgaccttct catcgacgga aagaaattct ctggaaatgc gatgtactca
240
aacaatggcc gtttaacagc gcacggaaca ttaatgttgg atttagatgt gagcattttg
300
ccacaaattt tacgtccaaa acaagagaaa atcgagtcaa aaggaatcaa gtcggttcgt
360
tcacgc
366

```

<210> 1876

<211> 122

<212> PRT

<213> Homo sapiens

<400> 1876

```

Lys Leu Gly Val Gln Val Val Arg Arg Phe Ser Gly Gly Gly Ala Val
      1           5           10           15
Tyr His Asp Met Gly Asn Ile Cys Phe Cys Phe Ile Thr Glu Asp Asp
      20           25           30
Gly Asp Ser Phe Arg Asp Phe Gly Lys Phe Thr Glu Pro Val Ile Glu
      35           40           45
Ala Leu His Lys Met Gly Ala Thr Gly Ala Glu Leu Gln Gly Arg Asn
      50           55           60
Asp Leu Leu Ile Asp Gly Lys Lys Phe Ser Gly Asn Ala Met Tyr Ser
      65           70           75           80
Asn Asn Gly Arg Leu Thr Ala His Gly Thr Leu Met Leu Asp Leu Asp
      85           90           95
Val Ser Ile Leu Pro Gln Ile Leu Arg Pro Lys Gln Glu Lys Ile Glu
      100          105          110
Ser Lys Gly Ile Lys Ser Val Arg Ser Arg

```

115

120

<210> 1877

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1877

acgcgtgagt ggtcgcaaat atgacgggca agaaacgctt agaaagaaac taccattaa
 60
 cgagggttatg caaattgcag aaatctctct atcggattgt ggctatatta tttcatcttt
 120
 ccaagctgct ggaccaaggg ctgtagggtt gcaacgacct attatatctg aacatttttt
 180
 tcaatttgac ccatttgata aacgacattg ggttgtctca catcatttac cacacgctgc
 240
 gacagctgct ttcacttccg gatttgaaga ttgcgctgga ttagtttcag atactgccgg
 300
 atcgaacact cttgatggaa aggactatgt tgaaagctgc tgcaatgcta ttccacg
 357

<210> 1878

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1878

Met	Gln	Ile	Ala	Glu	Ile	Ser	Leu	Ser	Asp	Cys	Gly	Tyr	Ile	Ile	Ser
1				5					10					15	
Ser	Phe	Gln	Ala	Ala	Gly	Pro	Arg	Ala	Val	Gly	Leu	Gln	Arg	Pro	Ile
			20					25					30		
Ile	Ser	Glu	His	Phe	Phe	Gln	Phe	Asp	Pro	Phe	Asp	Lys	Arg	His	Trp
		35					40					45			
Val	Val	Ser	His	His	Leu	Pro	His	Ala	Ala	Thr	Ala	Ala	Phe	Thr	Ser
	50					55					60				
Gly	Phe	Glu	Asp	Cys	Ala	Gly	Leu	Val	Ser	Asp	Thr	Ala	Gly	Ser	Asn
65				70						75				80	
Thr	Leu	Asp	Gly	Lys	Asp	Tyr	Val	Glu	Ser	Cys	Cys	Asn	Ala	Ile	Pro
			85					90						95	

<210> 1879

<211> 1062

<212> DNA

<213> Homo sapiens

<400> 1879

nacgcgtgga tgctccttgg acggcttttt cgtggtagag ggttcccggg gcgcgccgca
 60
 tccctgggaa gtagctgaag agaaggcaca ggaagagtcg cctccactga tggctctcct
 120
 gtcctccca caggetctga cgcctctct gcggtctcgg tgtttgaaca ggccacagtc
 180
 caggagcgct tacattcagg agctccgcgt agcacctgcc caaccaaact cagccctccg
 240

ttaagatcct ggttccatgc cgcagtagga cagcaggccc aagtctgcac atcccagtga
 300
 tgcaccatgc caatagtga taagttgaag gaggccctga aacccggccg caaggactcg
 360
 gctgatgatg gagaactggg gaagcttctt gcctcctctg ccaagaaggt cctttttacag
 420
 aaaatcgagt tcgagccagc cagcaagagc ttctcctacc agctggaggc cttaaagagc
 480
 aaatatgtgt tgctcaaccc caaacacagag ggagctagtc gccacaagag tggagatgac
 540
 ccaccggcca ggagacaggg cagtgaacac acgtatgaga gctgtggtga cggagtccca
 600
 gccccgcaga aagtgcctttt ccccacggag cgactgtctc tgaggtggga gcgggtcttc
 660
 cgcgtgggag caggactcca caaccttgga aacacctgct ttctcaatgc caccatccag
 720
 tgcttgacct acacaccacc tctagccaac tacctgctct ccaaggagca tgctcgagc
 780
 tgccaccagg gaagcttctg catgctgtgt gtcatgcaga accacattgt ccaggccttc
 840
 gccaacagcg gcaacgccat caagcccgct tccttcaccc gagacctgaa aaagatcgcc
 900
 cgacacttcc gctttgggaa ccaggaggac gcgcatgagt tcctgcggta caccatcgac
 960
 gccatgcaga aagcctgcct gaatggctgt gccaaagtgg atcgtcaaac gcaggctact
 1020
 accttggtcc atcaaatttt tggagggtat ctcagatcac gc
 1062

<210> 1880

<211> 252

<212> PRT

<213> Homo sapiens

<400> 1880

Met	Pro	Ile	Val	Asp	Lys	Leu	Lys	Glu	Ala	Leu	Lys	Pro	Gly	Arg	Lys
1				5				10						15	
Asp	Ser	Ala	Asp	Asp	Gly	Glu	Leu	Gly	Lys	Leu	Leu	Ala	Ser	Ser	Ala
			20					25					30		
Lys	Lys	Val	Leu	Leu	Gln	Lys	Ile	Glu	Phe	Glu	Pro	Ala	Ser	Lys	Ser
		35					40					45			
Phe	Ser	Tyr	Gln	Leu	Glu	Ala	Leu	Lys	Ser	Lys	Tyr	Val	Leu	Leu	Asn
	50					55					60				
Pro	Lys	Thr	Glu	Gly	Ala	Ser	Arg	His	Lys	Ser	Gly	Asp	Asp	Pro	Pro
65					70					75				80	
Ala	Arg	Arg	Gln	Gly	Ser	Glu	His	Thr	Tyr	Glu	Ser	Cys	Gly	Asp	Gly
			85					90					95		
Val	Pro	Ala	Pro	Gln	Lys	Val	Leu	Phe	Pro	Thr	Glu	Arg	Leu	Ser	Leu
		100						105					110		
Arg	Trp	Glu	Arg	Val	Phe	Arg	Val	Gly	Ala	Gly	Leu	His	Asn	Leu	Gly
	115						120					125			
Asn	Thr	Cys	Phe	Leu	Asn	Ala	Thr	Ile	Gln	Cys	Leu	Thr	Tyr	Thr	Pro
	130				135						140				
Pro	Leu	Ala	Asn	Tyr	Leu	Leu	Ser	Lys	Glu	His	Ala	Arg	Ser	Cys	His

145		150		155		160
Gln Gly Ser Phe Cys Met Leu Cys Val Met Gln Asn His Ile Val Gln						
		165		170		175
Ala Phe Ala Asn Ser Gly Asn Ala Ile Lys Pro Val Ser Phe Ile Arg						
		180		185		190
Asp Leu Lys Lys Ile Ala Arg His Phe Arg Phe Gly Asn Gln Glu Asp						
		195		200		205
Ala His Glu Phe Leu Arg Tyr Thr Ile Asp Ala Met Gln Lys Ala Cys						
		210		215		220
Leu Asn Gly Cys Ala Lys Leu Asp Arg Gln Thr Gln Ala Thr Thr Leu						
		225		230		235
Val His Gln Ile Phe Gly Gly Tyr Leu Arg Ser Arg						240
		245		250		

<210> 1881
 <211> 358
 <212> DNA
 <213> Homo sapiens

<400> 1881
 natcaccatg gatggacgcc ggcaaagcaa catcaatcga tgtcaagcca cagacatctc
 60
 aaatccctgc agaaccgcaa agtttggcag agaagaagga tgaatgggag atcgcataca
 120
 tcaacacgaa gattaacgac gtctacaacc ctctcaacaa caatgtggac tggttaagca
 180
 cgagaattga tctgctacag caagatttgg acaccactcg caagaaggat ctaaaaccag
 240
 ccacatcgat cgatatctgc accatcacat cgatcgatag caagttcgta gccatggaag
 300
 ataggttaca atcttataag gatatgcacg accgtttcac ctcacctatc aggcgata
 358

<210> 1882
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 1882
 Met Asp Ala Gly Lys Ala Thr Ser Ile Asp Val Lys Pro Gln Thr Ser
 1 5 10 15
 Gln Ile Pro Ala Glu Pro Gln Ser Leu Ala Glu Lys Lys Asp Glu Trp
 20 25 30
 Glu Ile Ala Tyr Ile Asn Thr Lys Ile Asn Asp Val Tyr Asn Pro Leu
 35 40 45
 Asn Asn Asn Val Asp Trp Leu Ser Thr Arg Ile Asp Leu Leu Gln Gln
 50 55 60
 Asp Leu Asp Thr Thr Arg Lys Lys Asp Leu Lys Pro Ala Thr Ser Ile
 65 70 75 80
 Asp Ile Cys Thr Ile Thr Ser Ile Asp Ser Lys Phe Val Ala Met Glu
 85 90 95
 Asp Arg Leu Gln Ser Tyr Lys Asp Met His Asp Arg Phe Thr Ser Pro
 100 105 110
 Ile Arg Arg

115

<210> 1883
 <211> 367
 <212> DNA
 <213> Homo sapiens

<400> 1883
 ggatcctatc atgaatctgc actctgacca gggaagtaac tcccttggt gctcagactt
 60
 gggctgggag aatgatacta agacaccaga catcacatcc attgctccca ttcccactat
 120
 tgctgaaggc gatgagtcctg tatttgtaa ctccaattca aacagctcga tggcgctcc
 180
 tgcctggag aacaatgctg ttgatctcac tgatgggctg acagatttgg aatcctatat
 240
 gaggtttctt atggatggcg gngcaagtga ttcaattgat agccttctga accttgatgg
 300
 atcacaggat cttggtagca atatggacct ctggaccttc gatgacatgc ccacgctgg
 360
 cgatttn
 367

<210> 1884
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1884
 Met Asn Leu His Ser Asp Gln Gly Ser Asn Ser Leu Gly Cys Ser Asp
 1 5 10 15
 Leu Gly Trp Glu Asn Asp Thr Lys Thr Pro Asp Ile Thr Ser Ile Ala
 20 25 30
 Pro Ile Pro Thr Ile Ala Glu Gly Asp Glu Ser Val Phe Val Asn Ser
 35 40 45
 Asn Ser Asn Ser Ser Met Val Pro Pro Val Leu Glu Asn Asn Ala Val
 50 55 60
 Asp Leu Thr Asp Gly Leu Thr Asp Leu Glu Ser Tyr Met Arg Phe Leu
 65 70 75 80
 Met Asp Gly Gly Ala Ser Asp Ser Ile Asp Ser Leu Leu Asn Leu Asp
 85 90 95
 Gly Ser Gln Asp Leu Gly Ser Asn Met Asp Leu Trp Thr Phe Asp Asp
 100 105 110
 Met Pro Ile Ala Gly Asp Xaa
 115

<210> 1885
 <211> 392
 <212> DNA
 <213> Homo sapiens

<400> 1885
 nacgcgtatt cgcaaagaat gtctttgcgg cacagagaca gtcgtcgtcc tcgacaccat
 60

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gttcgacgat ctcggcgatgt tgggaacccg gtgattttctc gcctgcggcg cacctcgtgg
120
ctgcgtagta cagctgctgt tgcgcgcggg gccgcgaccg gtaccggggt ccaaccactg
180
aactggtgga tcctcgtcac tcccgggtctc gctgcgctca tcctgctggt gcgcaacgcc
240
actggtcggg ccgcggcagg actgggggat ctcttcggca tcgggtctgtt taccaccacc
300
atttcctggg taggcgtcat cggcccgcgc gtggcgatac ttctcatcgc tgtcatggcg
360
ttgtggtgtc tgctggcccg gtggacgatt cg
392
```

```
<210> 1886
<211> 130
<212> PRT
<213> Homo sapiens
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```

<400> 1886
Xaa Ala Tyr Ser Gln Arg Met Ser Leu Arg His Arg Asp Ser Arg Arg
 1              5              10              15
Pro Arg His His Val Arg Arg Ser Arg His Val Gly Asn Pro Val Ile
          20              25              30
Ser Arg Leu Arg Arg Thr Ser Trp Leu Arg Ser Thr Ala Ala Val Ala
          35              40              45
Ala Gly Ala Ala Thr Gly Thr Gly Phe Gln Pro Leu Asn Trp Trp Ile
          50              55              60
Leu Val Ile Pro Gly Leu Ala Ala Leu Ile Leu Leu Val Arg Asn Ala
65              70              75              80
Thr Gly Arg Ala Ala Gly Leu Gly Tyr Leu Phe Gly Ile Gly Leu
          85              90              95
Phe Thr Thr Thr Ile Ser Trp Val Gly Val Ile Gly Pro Pro Val Ala
          100              105              110
Ile Leu Leu Ile Ala Val Met Ala Leu Trp Cys Leu Leu Ala Gly Trp
          115              120              125
Thr Ile
          130

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<210> 1887
<211> 363
<212> DNA
<213> Homo sapiens
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<400> 1887
cgcgagttca ttcggacctt tgaggacggt gccaaagcgtc tcaatgggga ccagccgata
60
gacttcttgg tgcaggaac tttatatccc gatgtcgtcg agtctggtgg cggtgagggc
120
gctgccaaata tcaagagtca ccataatggt ggtgggctcc ctgacgacct ccagttcagt
180
ctcgttgagc cattgcgcac cctctttaag gacgaggtgc gagccgtcgg actcgaactt
240
ggtctgcccg aggacatcgt ctggcgctcag cccttcccg gcccggggct ggctatccgc
300
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attattggcg aagtcaccgc ggagcgtctg gaggtgctac gcactgccga tgccatcacg
 360
 cgt
 363

<210> 1888
 <211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1888
 Arg Glu Phe Ile Arg Thr Phe Glu Asp Val Ala Lys Arg Leu Asn Gly
 1 5 10 15
 Asp Gln Pro Ile Asp Phe Leu Val Gln Gly Thr Leu Tyr Pro Asp Val
 20 25 30
 Val Glu Ser Gly Gly Gly Glu Gly Ala Ala Asn Ile Lys Ser His His
 35 40 45
 Asn Val Gly Gly Leu Pro Asp Asp Leu Gln Phe Ser Leu Val Glu Pro
 50 55 60
 Leu Arg Thr Leu Phe Lys Asp Glu Val Arg Ala Val Gly Leu Glu Leu
 65 70 75 80
 Gly Leu Pro Glu Asp Ile Val Trp Arg Gln Pro Phe Pro Gly Pro Gly
 85 90 95
 Leu Ala Ile Arg Ile Ile Gly Glu Val Thr Ala Glu Arg Leu Glu Val
 100 105 110
 Leu Arg Thr Ala Asp Ala Ile Thr Arg
 115 120

<210> 1889
 <211> 530
 <212> DNA
 <213> Homo sapiens

<400> 1889
 gcaccagatc tgctcatggc ggcgattgcg acggcaacgc agtcgatccg gcttgggtct
 60
 ggtgggggtga tggccatgca ctacgggtcg ctgcaaatac cggaacggtt ttccgacctc
 120
 acagcgctct tcggtgatcg tatcgacatg gggctgggccc gggctcccgg cggtgacatg
 180
 ctctccgccc atgccctcaa tcaggggagc gtcacccgcc ctgaggccat taattccctc
 240
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 300
 gtcgtcgtga ccccggcagg tcagatccag ccacagacgt ggctgctggg atcgtcgggc
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 cagtcatcag cgtgggctgg tgagcagggg atggactacg cctacgcccga gtttttcacc
 420
 gggcgccagg acaccgggat catggatcac taccgcgcgc acctgtccga cggttcccc
 480
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 530

<210> 1890

<211> 176
 <212> PRT
 <213> Homo sapiens

<400> 1890
 Ala Pro Asp Leu Leu Met Ala Arg Ile Ala Thr Ala Thr Gln Ser Ile
 1 5 10 15
 Arg Leu Gly Ser Gly Gly Val Met Ala Met His Tyr Gly Ser Leu Gln
 20 25 30
 Ile Ala Glu Arg Phe Ser Thr Leu Thr Ala Leu Phe Gly Asp Arg Ile
 35 40 45
 Asp Met Gly Leu Gly Arg Ala Pro Gly Gly Asp Met Leu Ser Ala His
 50 55 60
 Ala Leu Asn Gln Gly Gln Val Ile Arg Pro Glu Ala Ile Asn Ser Leu
 65 70 75 80
 Ile Ala Glu Thr Val Gly Phe Val Arg Glu Met Leu Pro Ser Lys His
 85 90 95
 Pro Tyr Ala Lys Val Val Val Thr Pro Ala Gly Gln Ile Gln Pro Gln
 100 105 110
 Thr Trp Leu Leu Gly Ser Ser Gly Gln Ser Ala Ala Trp Ala Gly Glu
 115 120 125
 Gln Gly Met Asp Tyr Ala Tyr Ala Gln Phe Phe Thr Gly Arg Gln Asp
 130 135 140
 Thr Gly Ile Met Asp His Tyr Arg Ala His Leu Ser Asp Gly Phe Pro
 145 150 155 160
 Gly Arg Thr Leu Ser Ala Val Cys Val Ser Ala Ala Pro Thr Arg Pro
 165 170 175

<210> 1891
 <211> 423
 <212> DNA
 <213> Homo sapiens

<400> 1891
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 120
 cgtcaattta cagaggcagc ccagcttccct atcaactttc tggcctggct taacggtgta
 180
 atgggcaggg ggcaaggcct tgaccacact catgtttctc ccccggcctc ctccactctg
 240
 ggattttgta ccggtatggg gaggcactac ggttgacagat ttagcttttc agcgtggata
 300
 caagcaccca agtgtcccag accacagcag aaaccgtgtt gctgccgttt ccaacctgct
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 420
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 423

<210> 1892
 <211> 121
 <212> PRT

<213> Homo sapiens

<400> 1892

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Met Trp Ala Pro Leu Pro Gln Ser Ser Ile Cys Thr Arg Leu Pro Thr
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Leu Gln Met Ala Pro Ala Cys Arg Glu Ile Gln Arg Gln Phe Thr Glu
           20           25           30
Ala Ala Gln Leu Pro Ile Asn Phe Leu Ala Trp Leu Asn Gly Val Met
           35           40           45
Gly Arg Gly Gln Gly Leu Asp His Thr His Val Ser Pro Pro Ala Ser
           50           55           60
Ser Thr Leu Gly Phe Cys Thr Gly Met Gly Arg His Tyr Gly Cys Arg
65           70           75           80
Phe Ser Phe Ser Ala Trp Ile Gln Ala Pro Lys Cys Pro Arg Pro Gln
           85           90           95
Gln Lys Pro Cys Cys Cys Arg Phe Gln Pro Ala Asp Leu Val Ser Cys
           100          105          110
Cys Arg Ser Asp Gln Gln Asn Cys Tyr
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<210> 1893

<211> 886

<212> DNA

<213> Homo sapiens

<400> 1893

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120
gtggaataca tgggtggcat ggacgacctc gtcgggatcg tcgccgagtt taagcctggt
180
ccggggcatc gccttggcgt gttggttgac cacctcgttg ccgacaccaa agagtcacgg
240
gtagcggacg aagtacgtcg tggtaggtat agcagtatg tcatgattac cggtcacgcg
300
tttattgaca tctggcaggc catcaaacct caacgaattg gccgtcaaga atggcctgag
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gtcccgatgg acgaagactt caaactcggc accctgaagc gtctgggcct gcctcactcg
420
accaagctg acgtcggttaa ggcttgccag gccatgctgg cagagtgcg cgactggcac
480
gatttagacc ccgcctttaa cacggagatg gagaaactta tcgatttcgt cacgcgtgac
540
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600
acctcatccg ggatgtgagt gccagggtta tcgatccccg gtcccgacc ctccacgatc
660
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720
gcgagctggg tgccgctgtg accaagtatg ccggcggtat tgcgtgggg gaggaatcag
780
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840

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acccattga tggcactaag aacttcgtgc acgggtctgt tgatca
886

<210> 1894

<211> 191

<212> PRT

<213> Homo sapiens

<400> 1894

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Val	Glu	Gly	Arg	His	Asp	Ala	Glu	Leu	Val	Glu	Lys	Ile	Trp	Gly	Asp
			20					25					30		
Asp	Leu	Arg	His	Val	Gly	Val	Val	Glu	Tyr	Met	Gly	Gly	Met	Asp	
		35				40					45				
Asp	Leu	Val	Gly	Ile	Val	Ala	Glu	Phe	Lys	Pro	Gly	Pro	Gly	His	Arg
		50				55					60				
Leu	Gly	Val	Leu	Val	Asp	His	Leu	Val	Ala	Asp	Thr	Lys	Glu	Ser	Arg
65					70					75				80	
Val	Ala	Asp	Glu	Val	Arg	Arg	Gly	Gly	Tyr	Ser	Glu	Tyr	Val	Met	Ile
				85					90					95	
Thr	Gly	His	Arg	Phe	Ile	Asp	Ile	Trp	Gln	Ala	Ile	Lys	Pro	Gln	Arg
			100					105					110		
Ile	Gly	Arg	Gln	Glu	Trp	Pro	Glu	Val	Pro	Met	Asp	Glu	Asp	Phe	Lys
		115				120						125			
Leu	Gly	Thr	Leu	Lys	Arg	Leu	Gly	Leu	Pro	His	Ser	Thr	Gln	Ala	Asp
		130				135					140				
Val	Gly	Lys	Ala	Trp	Gln	Ala	Met	Leu	Ala	Arg	Val	Arg	Asp	Trp	His
145					150					155				160	
Asp	Leu	Asp	Pro	Arg	Phe	Asn	Thr	Glu	Met	Glu	Lys	Leu	Ile	Asp	Phe
				165					170					175	
Val	Thr	Arg	Asp	His	Val	Asp	Glu	Leu	Asp	Asn	Gly	Glu	Met	Ala	
				180				185					190		

<210> 1895

<211> 2555

<212> DNA

<213> Homo sapiens

<400> 1895

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120
cttccccgtg tgccaagggtc taactcactg tagtctggat gtgggtgtat gttcatgtac
180
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240
taccctcaag tggatggcag aggcctcttg tgaaagtggg caatttgcaa tctttgcatt
300
aggatttcag atgcatgccca ggtttccact gattgccaga actcgagatc actacacatg
360
gatccccaaa atcaacatgg cagtggcagt tcgtagttg tgatccagca gccttctttg
420

gatagccgtc agagattaga ctatgagaga gagattcagc ctactgctat tttgtcctta
480
gaccagatca aggccataag aggagcaat gaatacacag aagggccttc ggtggtgaaa
540
agacctgctc ctcgagacgc accaagacaa gaaaagcatg aaaggactca tgaaatcata
600
ccaattaatg tgaataataa ctacgagcac agacacacaa gccacctggg acatgcagta
660
ctcccaagta atgccagggg ccccatTTTT agcagatcaa ccagcactgg aagtgcagcc
720
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780
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840
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960
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atgtgcttag tcaagggcct cttctaccac tgcctcaatg acgacgaagg ggattcctat
1080
tcagataatc cttgctcctg ttcacaatca cactgctgct ctagatacct gtgtatggga
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1200
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1320
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1380
tgtttttggt tttgttttct ttagaatttt tccctgtttc ccaccttctc tccccctgtt
1440
gccaagggtc aactcatgga tttttctctt tccctcatgga tgatcttcag caagagtgga
1500
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1560
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1620
gtacatgaac atacaccac atccagacta cagtgattta gagttgtttt gattgggtac
1680
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1740
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1800
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1860
cttcaagggt ctttccccct cagttttgtt gttgtcttac tctggagatg ccaagtgtat
1920
ttttctttc tatgtaattt tagattcgcc ttacaatgta aatcttcaca ttggagataa
1980
tattgggttg accttgccca tcttctctct agccttcgta tttgtgaagg actcagccac
2040

ctcccttctt caccatgc ttctcaccaa atttttgttg tcattgaggg cacttggata
 2100
 actcaagtgt atatttatag ctgatcaatc tatatgtgtc acagaactat gctgcctaaa
 2160
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 2220
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 2280
 tgtataaatc acaaagtga attctgacta tttttaagac aaaagtctgt taaacttttt
 2340
 tattgtaaag aatatttatt atgcgaatct ctattatttt atggatttta ttgcaaaaga
 2400
 ctgttgaaat gtactcatgt ttgaatataa caaaatatca atacttaacg gaaaataagg
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 2555

<210> 1896

<211> 139

<212> PRT

<213> Homo sapiens

<400> 1896

Cys	Glu	Gln	Cys	Gly	Lys	Cys	Lys	Cys	Gly	Glu	Cys	Thr	Ala	Pro	Arg
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Thr	Leu	Pro	Ser	Cys	Leu	Ala	Cys	Asn	Arg	Gln	Cys	Leu	Cys	Ser	Ala
			20					25					30		
Glu	Ser	Met	Val	Glu	Tyr	Gly	Thr	Cys	Met	Cys	Leu	Val	Lys	Gly	Ile
		35					40					45			
Phe	Tyr	His	Cys	Ser	Asn	Asp	Asp	Glu	Gly	Asp	Ser	Tyr	Ser	Asp	Asn
	50					55				60					
Pro	Cys	Ser	Cys	Ser	Gln	Ser	His	Cys	Cys	Ser	Arg	Tyr	Leu	Cys	Met
65					70					75				80	
Gly	Ala	Met	Ser	Leu	Phe	Leu	Pro	Cys	Leu	Leu	Cys	Tyr	Pro	Pro	Ala
			85					90						95	
Lys	Gly	Cys	Leu	Lys	Leu	Cys	Arg	Arg	Cys	Tyr	Asp	Trp	Ile	His	Arg
			100					105					110		
Pro	Gly	Cys	Arg	Cys	Lys	Asn	Ser	Asn	Thr	Val	Tyr	Cys	Lys	Leu	Glu
		115				120						125			
Ser	Cys	Pro	Ser	Arg	Gly	Gln	Gly	Lys	Pro	Ser					
	130					135									

<210> 1897

<211> 938

<212> DNA

<213> Homo sapiens

<400> 1897

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 120

cacgcttccct ccctgagcaa acaccgggcc atccatcgtg gggagcggcc ccaccgctgt
 180
 ctggagtgtg gccgggcctt cacgcagcgc tcggcgctga cttcgcacct gcgcgtccac
 240
 accggcgaga aacctatgg ctgcgccgac tgtggccgcc gcttcagcca gagctctgcc
 300
 ctctaccagc accggcgcggt gcacagcggc gagacccctt tcccctgccc ggactgtggc
 360
 cgcgccttgc cctacccctc ggacctgcgg cgccacgtgc gcatccacac gggcgagaag
 420
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 480
 cggcgggcac actccggcga gtgccctat gtttgtgacc agtgtggcaa acgtttctcc
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 600
 cctgactgtg gtcgctgctt ccggaggagc cggtccttgg ccaatcaccg gaccacacac
 660
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 720
 ctggccagcc accggcgcggt gcaactcgggc gagcggccct atgcctgcga cctttgctcc
 780
 aagcgttttg ctgagtggag ccacctggcc cagcaccagc tgctgcacac gggggagaag
 840
 cctttccctt gcctcgagtg tggccgggct tccgccagag gtggtctctg gctgtccaca
 900
 agtgtagccc caaggcccca aactgtagcc ctagatct
 938

<210> 1898

<211> 312

<212> PRT

<213> Homo sapiens

<400> 1898

Arg	His	Gly	Cys	Tyr	Val	Cys	Gly	Lys	Ser	Phe	Ala	Trp	Arg	Ser	Thr
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Leu	Val	Glu	His	Val	Tyr	Ser	His	Thr	Gly	Glu	Lys	Pro	Phe	His	Cys
			20					25					30		
Thr	Asp	Cys	Gly	Lys	Gly	Phe	Gly	His	Ala	Ser	Ser	Leu	Ser	Lys	His
		35					40						45		
Arg	Ala	Ile	His	Arg	Gly	Glu	Arg	Pro	His	Arg	Cys	Leu	Glu	Cys	Gly
	50					55					60				
Arg	Ala	Phe	Thr	Gln	Arg	Ser	Ala	Leu	Thr	Ser	His	Leu	Arg	Val	His
65					70					75				80	
Thr	Gly	Glu	Lys	Pro	Tyr	Gly	Cys	Ala	Asp	Cys	Gly	Arg	Arg	Phe	Ser
			85					90						95	
Gln	Ser	Ser	Ala	Leu	Tyr	Gln	His	Arg	Arg	Val	His	Ser	Gly	Glu	Thr
			100					105					110		
Pro	Phe	Pro	Cys	Pro	Asp	Cys	Gly	Arg	Ala	Phe	Ala	Tyr	Pro	Ser	Asp
	115					120						125			
Leu	Arg	Arg	His	Val	Arg	Ile	His	Thr	Gly	Glu	Lys	Pro	Tyr	Pro	Cys
130					135						140				
Pro	Asp	Cys	Gly	Arg	Arg	Phe	Ser	Ser	Ser	Ser	Leu	Leu	Val	Ser	His

145		150		155		160									
Arg	Arg	Ala	His	Ser	Gly	Glu	Cys	Pro	Tyr	Val	Cys	Asp	Gln	Cys	Gly
				165				170					175		
Lys	Arg	Phe	Ser	Gln	Arg	Lys	Asn	Leu	Ser	Gln	His	Gln	Val	Ile	His
			180					185					190		
Thr	Gly	Glu	Lys	Pro	Tyr	His	Cys	Pro	Asp	Cys	Gly	Arg	Cys	Phe	Arg
		195					200					205			
Arg	Ser	Arg	Ser	Leu	Ala	Asn	His	Arg	Thr	Thr	His	Thr	Gly	Glu	Lys
	210					215					220				
Pro	His	Gln	Cys	Pro	Ser	Cys	Gly	Arg	Arg	Phe	Ala	Tyr	Pro	Ser	Leu
225					230					235					240
Leu	Ala	Ser	His	Arg	Arg	Val	His	Ser	Gly	Glu	Arg	Pro	Tyr	Ala	Cys
			245						250					255	
Asp	Leu	Cys	Ser	Lys	Arg	Phe	Ala	Gln	Trp	Ser	His	Leu	Ala	Gln	His
		260						265					270		
Gln	Leu	Leu	His	Thr	Gly	Glu	Lys	Pro	Phe	Pro	Cys	Leu	Glu	Cys	Gly
		275					280					285			
Arg	Ala	Ser	Ala	Arg	Gly	Gly	Leu	Trp	Leu	Ser	Thr	Ser	Val	Ala	Pro
	290					295					300				
Arg	Pro	Gln	Thr	Val	Ala	Leu	Asp								
305					310										

<210> 1899

<211> 508

<212> DNA

<213> Homo sapiens

<400> 1899

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120
gaggaaatat caggccggct gcggagggaa ctggggccaaa gggacaggaa ccggggggcag
180
ctggaggcca ccctgctgca ggtgttgaaa aaggtggagg agtttcgaat caggtattga
240
gatgagatct ccaagcgac agacatggag ttcacctttg ttcagctgaa gaaggacctg
300
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360
gtggagttga tgaaaaccat ctatgagcag gagctgaagg acctggcagc acaggtgaag
420
gatgtgtcgg tgaccgtcgg catggacagc cgctgccaca tcgacctgag cggcatcgtg
480
gaggaggtga aggcccagta tgacgccg
508

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<210> 1900

<211> 79

<212> PRT

<213> Homo sapiens

<400> 1900

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Lys Phe Ala Ser Leu Ile Gly Lys Val Gln Ala Leu Glu Gln Arg Asp

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      1             5             10             15
Gln Leu Leu Glu Thr Arg Trp Ser Phe Leu Gln Gly Gln Asp Ser Ala
      20             25             30
Ile Phe Asp Leu Gly His Leu Tyr Glu Glu Ile Ser Gly Arg Leu Arg
      35             40             45
Arg Glu Leu Gly Gln Arg Asp Arg Asn Arg Gly Gln Leu Glu Ala Thr
      50             55             60
Leu Leu Gln Val Leu Lys Lys Val Glu Glu Phe Arg Ile Arg Tyr
      65             70             75

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<210> 1901

<211> 453

<212> DNA

<213> Homo sapiens

<400> 1901

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cgggtgttcgg cgatgcgaag gcaaccgcgc cttccaagtt cgaccggttc cagccgcgcg
120
aggaattcga cgaggtcagc gccgccatgc agttccactg gggctccttc ttccacaacg
180
cgcatccggg cgagaagtgg ccggtctacg gtttccgcag cgacacggag cccggccgcg
240
cgaccgcgat cttcgcggcg aagtctcccg tggagtagca cccaaggcg gcgcagcgcc
300
gcgcgtggga gggcttttgac atgcgcgaat ggggcatgca caggcaggac ctggtggaaa
360
cgctcaccga ttccatcgcc gacgagggca acgcttagcg acgccagcgc caccgagttt
420
agagaaatga aagaaatttt aatagagggt gga
453

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<210> 1902

<211> 151

<212> PRT

<213> Homo sapiens

<400> 1902

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Thr Arg Gly Pro Arg Cys Ala Gly Ser Gly Ser Ala Pro Cys Thr Pro
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Arg Thr Trp Arg Arg Cys Ser Ala Met Arg Arg Gln Pro Ala Leu Pro
      20             25             30
Ser Ser Thr Arg Ser Ser Arg Ala Arg Asn Ser Thr Arg Ser Ala Pro
      35             40             45
Pro Cys Ser Ser Thr Gly Ala Pro Ser Ser Thr Thr Arg Ile Arg Ala
      50             55             60
Arg Ser Gly Arg Ser Thr Val Ser Ala Ala Thr Arg Ser Pro Ala Ala
      65             70             75             80
Arg Pro Arg Ser Ser Arg Arg Ser Pro Pro Trp Ser Thr Thr Pro Arg
      85             90             95
Arg Arg Ser Ala Ala Arg Gly Arg Ala Leu Thr Cys Ala Asn Gly Ala
      100            105            110
Cys Thr Gly Arg Thr Trp Trp Lys Arg Ser Pro Ile Pro Ser Pro Thr

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	115		120		125
Arg	Ala Thr Leu Ser Asp	Ala Ser Ala Thr Glu	Phe Arg Glu Met Lys		
	130	135	140		
Glu Ile Leu Ile Glu Gly Gly					
145	150				

<210> 1903

<211> 531

<212> DNA

<213> Homo sapiens

<400> 1903

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120
atgtgtgcca acccccgctt gtttccaaat gaccaacggg aagggcaggt gaagcagggg
180
ctgctggggg attgctgggt cctgtgtgcc tgcgccgcgc tgcagaagag caggcacctc
240
ctggaccagg tcattcctgc gggacagccg agctgggccg accaggagta ccggggctcc
300
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420
gatggaacct gaagggcgta gcaggaagcg gaggccagca ggacaggcca ggccgctggg
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531

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<210> 1904

<211> 133

<212> PRT

<213> Homo sapiens

<400> 1904

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Ser	Leu	Phe	Cys	Asp	Leu	Ser	Thr	Pro	Leu	Ala	Gln	Phe	Arg	Glu	Asp
			20					25					30		
Ile	Thr	Trp	Arg	Arg	Pro	Gln	Arg	Ile	Cys	Ala	Asn	Pro	Arg	Leu	Phe
			35				40					45			
Pro	Asn	Asp	Gln	Arg	Glu	Gly	Gln	Val	Lys	Gln	Gly	Leu	Leu	Gly	Asp
	50					55					60				
Cys	Trp	Phe	Leu	Cys	Ala	Cys	Ala	Ala	Leu	Gln	Lys	Ser	Arg	His	Leu
65				70					75				80		
Leu	Asp	Gln	Val	Ile	Pro	Ala	Gly	Gln	Pro	Ser	Trp	Ala	Asp	Gln	Glu
			85					90					95		
Tyr	Arg	Gly	Ser	Phe	Thr	Cys	Arg	Phe	Trp	Gln	Phe	Gly	Arg	Trp	Val
		100					105					110			
Glu	Gly	Pro	Trp	Val	Pro	Ser	Ser	Pro	Cys	Gly	Arg	Gly	Arg	Trp	Arg
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Met	Pro	Trp	Trp	Thr											

130

<210> 1905
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 1905
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 240
 ttcgtgcaac gtagcttcgg cgcgcgcnc a gcaaggccag ggcaggcggt atacgctgca
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 387

<210> 1906
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1906
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 35 40 45
 Leu Leu Gly Ala Leu Ala Asp His Leu Ala Val Leu Leu Phe Ala Gln
 50 55 60
 Val Leu His Ala Ala Thr Phe Ala Ser Phe His Ala Ser Ala Ile His
 65 70 75 80
 Phe Val Gln Arg Ser Phe Gly Ala Arg Xaa Ala Arg Pro Gly Gln Ala
 85 90 95
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 100 105 110
 Ala Gly Tyr Ser Trp Asn Ser Leu Gly Pro Thr Trp Thr Phe Ser Ile
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<210> 1907
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 1907

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 180
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 240
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 333

<210> 1908

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1908

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Gly	Phe	Asp	Lys	Lys	Leu	Arg	Ala	Ala	Arg	Arg	Glu	Thr	Leu	Glu	Met
			20					25					30		
Cys	Val	Asn	Asp	Leu	Phe	Pro	Gly	Gly	Asp	Thr	Ser	Lys	Ala	Thr	
		35					40				45				
Phe	Trp	Thr	Gly	Leu	Arg	Pro	Met	Thr	Pro	Asp	Gly	Thr	Pro	Ile	Val
	50				55					60					
Gly	Arg	Thr	Pro	Val	Ser	Asn	Leu	Phe	Leu	Asn	Thr	Gly	His	Gly	Thr
65					70					75				80	
Leu	Gly	Trp	Thr	Met	Val	Cys	Gly	Ser	Gly	Gln	Leu	Leu	Ala	Asp	Leu
				85					90					95	
Ile	Ser	Gly	Lys	Met	Pro	Ala	Ile	Gln	Ala	Asp	Asp	Leu	Ser	Xaa	
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<210> 1909

<211> 2767

<212> DNA

<213> Homo sapiens

<400> 1909

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 180
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 420

tacgogtttg ttcacatgga gaaggaagca gatgccaaag ccgcaatcgc gcagctcaac
480
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1980
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2040

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 2767

<210> 1910

<211> 669

<212> PRT

<213> Homo sapiens

<400> 1910

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Glu	Leu	Ala	Ala	Leu	Phe	Ala	Pro	Tyr	Gly	Thr	Val	Met	Ser	Cys	Ala
			20					25					30		
Val	Met	Lys	Gln	Phe	Ala	Phe	Val	His	Met	Arg	Glu	Asn	Ala	Gly	Ala
		35					40					45			
Leu	Arg	Ala	Ile	Glu	Ala	Leu	His	Gly	His	Glu	Leu	Arg	Pro	Gly	Arg
	50					55					60				
Ala	Leu	Val	Val	Glu	Met	Ser	Arg	Pro	Arg	Pro	Leu	Asn	Thr	Trp	Lys
65				70					75					80	
Ile	Phe	Val	Gly	Asn	Val	Ser	Ala	Ala	Cys	Thr	Ser	Gln	Glu	Leu	Arg
			85					90					95		
Ser	Leu	Phe	Glu	Arg	Arg	Gly	Arg	Val	Ile	Glu	Cys	Asp	Val	Val	Lys
			100				105					110			
Asp	Tyr	Ala	Phe	Val	His	Met	Glu	Lys	Glu	Ala	Asp	Ala	Lys	Ala	Ala
	115					120					125				
Ile	Ala	Gln	Leu	Asn	Gly	Lys	Glu	Val	Lys	Gly	Lys	Arg	Ile	Asn	Val
	130				135						140				
Glu	Leu	Ser	Thr	Lys	Gly	Gln	Lys	Lys	Gly	Pro	Gly	Leu	Ala	Val	Gln
145				150					155					160	
Ser	Gly	Asp	Lys	Thr	Lys	Lys	Pro	Gly	Ala	Gly	Asp	Thr	Ala	Phe	Pro

					165										175		
Gly	Thr	Gly	Gly	Phe	Ser	Ala	Thr	Phe	Asp	Tyr	Gln	Gln	Ala	Phe	Gly		
			180					185					190				
Asn	Ser	Thr	Gly	Gly	Phe	Asp	Gly	Gln	Ala	Arg	Gln	Pro	Thr	Pro	Pro		
			195				200					205					
Phe	Phe	Gly	Arg	Asp	Arg	Ser	Pro	Leu	Arg	Arg	Ser	Pro	Pro	Arg	Ala		
	210					215					220						
Ser	Tyr	Val	Ala	Pro	Leu	Thr	Ala	Gln	Pro	Ala	Thr	Tyr	Arg	Ala	Gln		
225					230					235					240		
Pro	Ser	Val	Ser	Leu	Gly	Ala	Ala	Tyr	Arg	Ala	Gln	Pro	Ser	Ala	Ser		
				245					250					255			
Leu	Gly	Val	Gly	Tyr	Arg	Thr	Gln	Pro	Met	Thr	Ala	Gln	Ala	Ala	Ser		
			260					265					270				
Tyr	Arg	Ala	Gln	Pro	Ser	Val	Ser	Leu	Gly	Ala	Pro	Tyr	Arg	Gly	Gln		
		275					280					285					
Leu	Ala	Ser	Pro	Ser	Ser	Gln	Ser	Ala	Ala	Ala	Ser	Ser	Leu	Gly	Pro		
	290					295					300						
Tyr	Gly	Gly	Ala	Gln	Pro	Ser	Ala	Ser	Ala	Leu	Ser	Ser	Tyr	Gly	Gly		
305					310					315					320		
Gln	Ala	Ala	Ala	Ala	Ser	Ser	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Gly	Ser		
				325					330					335			
Ser	Leu	Ala	Ser	Tyr	Gly	Asn	Gln	Pro	Ser	Ser	Tyr	Gly	Ala	Gln	Ala		
		340						345					350				
Ala	Ser	Ser	Tyr	Gly	Val	Arg	Ala	Ala	Ala	Ser	Ser	Tyr	Asn	Thr	Gln		
		355				360					365						
Gly	Ala	Ala	Ser	Ser	Leu	Gly	Ser	Tyr	Gly	Ala	Gln	Ala	Ala	Ser	Tyr		
	370					375					380						
Gly	Ala	Gln	Ser	Ala	Ala	Ser	Ser	Leu	Ala	Tyr	Gly	Ala	Gln	Ala	Ala		
385					390					395					400		
Ser	Tyr	Asn	Ala	Gln	Pro	Ser	Ala	Ser	Tyr	Asn	Ala	Gln	Ser	Ala	Pro		
				405					410					415			
Tyr	Ala	Ala	Gln	Gln	Ala	Ala	Ser	Tyr	Ser	Ser	Gln	Pro	Ala	Ala	Tyr		
		420					425						430				
Val	Ala	Gln	Pro	Ala	Thr	Ala	Ala	Ala	Tyr	Ala	Ser	Gln	Pro	Ala	Ala		
		435					440					445					
Tyr	Ala	Ala	Gln	Ala	Thr	Thr	Pro	Met	Ala	Gly	Ser	Tyr	Gly	Ala	Gln		
	450					455					460						
Pro	Val	Val	Gln	Thr	Gln	Leu	Asn	Ser	Tyr	Gly	Ala	Gln	Ala	Ser	Met		
465					470					475					480		
Gly	Leu	Ser	Gly	Ser	Tyr	Gly	Ala	Gln	Ser	Ala	Ala	Ala	Ala	Thr	Gly		
				485					490					495			
Ser	Tyr	Gly	Ala	Ala	Ala	Ala	Tyr	Gly	Ala	Gln	Pro	Ser	Ala	Thr	Leu		
			500														

595	600	605
Ala Glu Leu Ser Asp Tyr Arg Arg Leu Ser Glu Ser Gln Leu Ser Phe		
610	615	620
Arg Arg Ser Pro Thr Lys Ser Ser Leu Asp Tyr Arg Arg Leu Pro Asp		
625	630	635
Ala His Ser Asp Tyr Ala Arg Tyr Ser Gly Ser Tyr Asn Asp Tyr Leu		
645	650	655
Arg Ala Ala Gln Met His Ser Gly Tyr Gln Arg Arg Met		
660	665	

<210> 1911

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1911

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120
cgcattcgacg atgaaagctt cctccgcccga gttgagccga cccaagccgc accgtgggagc
180
gcagcgcata gccagcaggc gtggtggaat cacctgaagt acctgcgcac cgccgcgcgt
240
gaagcactgg tgggtccgct cgtcattgag gtggagggga aattcgcagg gcaggttaacc
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339

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<210> 1912

<211> 113

<212> PRT

<213> Homo sapiens

<400> 1912

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Val Phe Pro Ser Gly Ala Arg Met Arg Leu Arg Pro Leu Leu Arg Ser		
20	25	30
Asp Gly His Glu Trp Arg Arg Gln Arg Ile Asp Asp Glu Ser Phe Leu		
35	40	45
Arg Pro Val Glu Pro Thr Gln Ala Ala Pro Trp Ala Ala Ala His Ser		
50	55	60
Gln Gln Ala Trp Trp Asn His Leu Lys Tyr Leu Arg Thr Ala Ala Arg		
65	70	75
Glu Ala Leu Val Val Pro Leu Val Ile Glu Val Glu Gly Lys Phe Ala		
85	90	95
Gly Gln Val Thr Leu Gly Asn Ile Gln His Gly Ser Ile Arg Asp Cys		
100	105	110
Trp		

<210> 1913

<211> 767

<212> DNA

<213> Homo sapiens

<400> 1913

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 120
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 180
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 240
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 300
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 360
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 660
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<210> 1914

<211> 190

<212> PRT

<213> Homo sapiens

<400> 1914

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Ala	Val	Gly	Gln	Tyr	Lys	Ala	Pro	Arg	Ile	Lys	Leu	Ser	Trp	Arg	Glu
		20						25					30		
Leu	Val	Leu	Val	Pro	Ile	Asn	Ala	Thr	His	Leu	His	Ser	Asn	Pro	Pro
		35				40						45			
Gln	Val	Val	Gln	His	Ala	Ala	Glu	Leu	Arg	Arg	Ser	His	Pro	Asp	Leu
		50			55						60				
Ala	Ile	Lys	Val	Ala	Arg	Pro	Thr	Gly	Pro	Ala	Pro	Val	Leu	Leu	Asn
65					70					75					80
Leu	Val	Asp	Thr	Arg	Leu	Arg	Leu	Ala	Ala	His	Arg	Val	His	Ala	Gln
			85					90						95	
Glu	Leu	Asp	Ser	Leu	Val	Leu	Ser	Ser	Pro	Asp	Gly	Gly	Asp	Leu	Arg
			100					105					110		
Gly	Ser	Ala	Met	Leu	Ser	Arg	Leu	Thr	Arg	Leu	Trp	Ser	Gln	His	His
		115					120						125		
His	Leu	Pro	Val	Arg	Ile	Ala	Thr	Asn	Arg	Gly	Gly	Ala	Thr	Ala	Val

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      130              135              140
Glu Glu Val Val Ala Arg Leu Arg Gln Glu Gly Arg Arg His Ile Ala
145              150              155              160
Val Gly Ser Leu Trp Ile Cys Asp Asp Glu Asn Phe Arg Ile His Thr
      165              170              175
Arg Gln Ala Leu His Ala Gly Ala Glu Val Val Ala Ala Pro
      180              185              190

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<210> 1915

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1915

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120
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240
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300
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360
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571

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<210> 1916

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1916

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      20      25      30
Ser Thr Thr Ser Ala Pro Ala Met Gln Asp Pro Gly Ser His Pro Leu
      35      40      45
His Pro Pro Cys Gly Thr Pro Ala Pro His Pro Glu His Pro Gln Cys
      50      55      60
Gly Thr Ala Ala Ser His Pro Leu His Leu Pro Cys Arg Ile Pro Glu
      65      70      75      80
Ser His Pro Pro His Pro Pro Cys Gly Ile Pro Glu Ser His Pro Pro
      85      90      95
His Pro Pro Tyr Leu Pro His Pro Pro Cys Gly Thr Pro Ala Ser His

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100 105 110
 Pro Pro His Pro Pro Cys Gly
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<210> 1917
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 1917
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 cateccctatg gcccggtgaa gtcggtaaag gtagcaggtc cggccggcca cccagccccg
 180
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 240
 gactcccca ggagacactt cccggtgact catttgagcgt tcaatcgga gacaaccac
 300
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 360

<210> 1918
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 1918
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 20 25 30
 Val Val Ala Ser Ala Leu Asp Arg His Pro Tyr Gly Pro Val Lys Ser
 35 40 45
 Val Lys Val Ala Gly Pro Ala Gly His Pro Ala Pro Asp Phe Ala Ala
 50 55 60
 Gly Trp Leu Leu Asp Arg Leu Ala Val Pro Val His Arg Thr Val Ala
 65 70 75 80
 Asp Ser Pro Arg Arg His Phe Pro Val Thr His Leu Gln Phe Asn Arg
 85 90 95
 Glu Thr Thr His Val Asp Val Asp Val Ile Asp Glu Arg Thr Val Arg
 100 105 110
 Val Cys Val Pro Gly Ser Pro Glu
 115 120

<210> 1919
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 1919
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 120
 ccacctccat cctctttgcc ccttactaaa cactgggagc cgcgccgccc gcgacaggcc
 180
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 240
 tacgcactta caaagtgcag gccaccgccc agccccacct ccagacacag gcggaggcca
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 354

<210> 1920

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1920

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Cys	Leu	Ser	Leu	Pro	Gly	Cys	Ser	His	Pro	Ser	Cys	Thr	Ala	Glu	Ala
			20					25					30		
Trp	Pro	Arg	Ala	Ser	Arg	Pro	Arg	Pro	Pro	Pro	Ser	Ser	Leu	Pro	Leu
		35					40					45			
Thr	Lys	His	Trp	Glu	Pro	Ala	Arg	Pro	Arg	Gln	Ala	Arg	Pro	Ala	Gly
	50					55					60				
Arg	Cys	Arg	Arg	Thr	Ala	Gln	Arg	Ile	Gln	Gln	Cys	Lys	Tyr	Pro	Thr
65					70					75					80
Tyr	Ala	Leu	Thr	Lys	Cys	Arg	Pro	Pro	Pro	Ser	Pro	Thr	Ser	Arg	His
				85					90					95	
Arg	Arg	Arg	Pro	Ser	Ser	Arg	Ala	Pro	Tyr	His	Pro	Val	Pro	Ser	Pro
			100					105						110	
Pro	Tyr	Pro	Cys	Gln	Leu										
			115												

<210> 1921

<211> 357

<212> DNA

<213> Homo sapiens

<400> 1921

gaattcatct ggaggcagag agatggggaa gcgggtggga gaagagcaag aacggaaact
 60
 atttttaata caaatccagt catggtattg tatacacagc agcctctgtc ttccagaaac
 120
 ctacacggcc gccacaccaa agttaatgcc accaggcgtc atcacacaga tgtgaggtgc
 180
 aggtgccact ccacagcogt gggcagacct gggagcccag ctctctctgg ttccaccctc
 240
 cacactgccc accccatcct tctctcccag tctccactcc atcgaagcct ccagatgac
 300
 ttcattgtggg gacaggagaa ctacagatca tggtgagaa gggcgngtg tngtcca
 357

<210> 1922

<211> 92
 <212> PRT
 <213> Homo sapiens

<400> 1922
 Met Val Leu Tyr Thr Gln Gln Pro Leu Ser Ser Arg Asn Leu His Gly
 1 5 10 15
 Arg His Thr Lys Val Asn Ala Thr Arg Arg His His Thr Asp Val Arg
 20 25 30
 Cys Arg Cys His Ser Thr Ala Val Gly Arg Pro Gly Ser Pro Ala Pro
 35 40 45
 Pro Gly Phe Thr Leu His Thr Ala His Pro Ile Leu Leu Ser Gln Ser
 50 55 60
 Pro Leu His Arg Ser Leu Pro Asp Asp Phe Met Trp Gly Gln Glu Asn
 65 70 75 80
 Tyr Arg Ser Trp Leu Arg Arg Ala Xaa Cys Xaa Pro
 85 90

<210> 1923
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1923
 nattnaatta tggtagagaaa aggcttatgc gttgcattgc tcgtgcttgt cacactgtca
 60
 ggtagtgcac agaagaaaga atgggttcagc aacattaaac tctcaggcta tggaatgacc
 120
 cagtatcaat atactgatca agagggaagc aaaggccatt catttaatct gcgattgttc
 180
 ccgttgccctt taaacggacg tatcttaaata gacttttatt ggaaggcaca ggcccaattc
 240
 aatggaaaca catcgacatt gggaagcagt ccacgtcttg tagacctatt tgtagagtgg
 300
 cagaaatatg attattttcaa ggtgaagtta ggccagttta agcgaccatt cacgtttgaa
 360
 aatcccag
 368

<210> 1924
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 1924
 Met Val Arg Lys Gly Leu Cys Val Ala Leu Leu Val Leu Val Thr Leu
 1 5 10 15
 Ser Gly Ser Ala Gln Lys Lys Glu Trp Phe Ser Asn Ile Lys Leu Ser
 20 25 30
 Gly Tyr Gly Met Thr Gln Tyr Gln Tyr Thr Asp Gln Glu Gly Ser Lys
 35 40 45
 Gly His Ser Phe Asn Leu Arg Leu Phe Pro Leu Pro Leu Asn Gly Arg
 50 55 60
 Ile Leu Asn Asp Phe Tyr Trp Lys Ala Gln Ala Gln Phe Asn Gly Asn


```

65              70              75              80
Thr Ser Thr Leu Gly Ser Ser Pro Arg Leu Val Asp Leu Phe Val Glu
              85              90              95
Trp Gln Lys Tyr Asp Tyr Phe Lys Val Lys Leu Gly Gln Phe Lys Arg
              100              105              110
Pro Phe Thr Phe Glu Asn Pro
              115

```

<210> 1925

<211> 427

<212> DNA

<213> Homo sapiens

<400> 1925

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actagtgttt ccagcaggca gcgatttaat tgttcttgca ttgaaaccca gtgtggcaag
60
ccccctgtg atttgaggct aatccctccc caccctgttc tggcacatgt gcggtgcccc
120
gggtccccc caggctgtga gcagataaag cctgcgtgg cttcacaaca gtgactgggt
180
ctgagaaaca ggtccttgta caagcgacag ggagtgtca caccagatgt ggcagccct
240
ccacgccagg ctgtgtggtg cagccgcctg gtatatgtgt ccatcgctga tgaaaacagc
300
gttgtgtggt gcatgactgt tgtctgtttt cttcatggaa acaaggaaac ctaagcatta
360
aaacaacacc atccacgtct ggttccttag agcaaatgga agcaccaggc tctggtgcac
420
ggcgcgcg
427

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<210> 1926

<211> 104

<212> PRT

<213> Homo sapiens

<400> 1926

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Met His His Thr Thr Leu Phe Ser Ser Ala Met Asp Thr Tyr Thr Arg
1          5          10          15
Arg Leu His His Thr Ala Trp Arg Gly Gly Ala Ala Thr Ser Gly Val
20          25          30
Ser Thr Pro Cys Arg Leu Tyr Lys Asp Leu Phe Leu Arg Thr Ser His
35          40          45
Cys Cys Glu Ala Thr Gln Gly Phe Ile Cys Ser Gln Pro Gly Gly Ser
50          55          60
Pro Gly His Arg Thr Cys Ala Arg Thr Gly Trp Gly Gly Ile Ser Leu
65          70          75          80
Lys Ser Gln Gly Gly Leu Pro His Trp Val Ser Met Gln Glu Gln Leu
85          90          95
Asn Arg Cys Leu Leu Glu Thr Leu
100

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<210> 1927

<211> 516

<212> DNA

<213> Homo sapiens

<400> 1927

nntctagaag actccaccta cttttcccca gactttcagc tctattctgg gaggcacgaa
 60
 acatctgctt tgacgggtgga ggcaaccagt agcatcaggg aaaaagttgt tgaagatcct
 120
 ctttgtaact tccactcccc aaacttcctg aggatctcag aggtggaaat gagagggtcc
 180
 gaggatgcgg cagctggaac agtattgcag cggctgatcc aggaacaact gcggtatggc
 240
 accccaaccg agaacatgaa cttgctggcc attcagcacc aggccacagg gagtgcagga
 300
 ccagcccatc ctacaaacaa cttttcttcc acggaaaacc tcaactcaaga agaccacaa
 360
 atgggtctacc agtcagcacg ccaagaaccg cagggtcaag aacaccagng tgganncaat
 420
 acggtgatgg agaaacaggt ccggtccacg cagcctcagc agaacaacga ggaactgccc
 480
 acttacgagg aggccaaagc acagcccttc acgcgt
 516

<210> 1928

<211> 172

<212> PRT

<213> Homo sapiens

<400> 1928

Xaa	Leu	Glu	Asp	Ser	Thr	Tyr	Phe	Ser	Pro	Asp	Phe	Gln	Leu	Tyr	Ser
1				5					10					15	
Gly	Arg	His	Glu	Thr	Ser	Ala	Leu	Thr	Val	Glu	Ala	Thr	Ser	Ser	Ile
			20					25					30		
Arg	Glu	Lys	Val	Val	Glu	Asp	Pro	Leu	Cys	Asn	Phe	His	Ser	Pro	Asn
		35				40					45				
Phe	Leu	Arg	Ile	Ser	Glu	Val	Glu	Met	Arg	Gly	Ser	Glu	Asp	Ala	Ala
50					55					60					
Ala	Gly	Thr	Val	Leu	Gln	Arg	Leu	Ile	Gln	Glu	Gln	Leu	Arg	Tyr	Gly
65				70					75					80	
Thr	Pro	Thr	Glu	Asn	Met	Asn	Leu	Leu	Ala	Ile	Gln	His	Gln	Ala	Thr
			85					90					95		
Gly	Ser	Ala	Gly	Pro	Ala	His	Pro	Thr	Asn	Asn	Phe	Ser	Ser	Thr	Glu
		100					105					110			
Asn	Leu	Thr	Gln	Glu	Asp	Pro	Gln	Met	Val	Tyr	Gln	Ser	Ala	Arg	Gln
		115				120					125				
Glu	Pro	Gln	Gly	Gln	Glu	His	Gln	Xaa	Gly	Xaa	Asn	Thr	Val	Met	Glu
130					135					140					
Lys	Gln	Val	Arg	Ser	Thr	Gln	Pro	Gln	Gln	Asn	Asn	Glu	Glu	Leu	Pro
145				150						155				160	
Thr	Tyr	Glu	Glu	Ala	Lys	Ala	Gln	Pro	Phe	Thr	Arg				
			165					170							

<210> 1929

<211> 843

<212> DNA

<213> Homo sapiens

<400> 1929

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nnccgcggtac actcaggggtc tgggggtccct cttccccaag aggcctgact gcctgggtgt
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tctccaggta catgtccttc aaggagaaat acacttcctg gcctgggcct gggccagggg
120
ccttctgggc cttgtctgga gtgcccacag cagaggctgg cttcctggta ctatctgtgc
180
cagaggaccc aggccccgt gcagccctgc ctctgggctg ggtctgaacc tgctccacgc
240
ccacgggccc ctgagtccca caggagtcag gctcgtctga gctggggatg cagttttctg
300
aagaacggcg gctttgggct gccttctcta actctggctt ccgcacctg cttggattcc
360
tcatttttct ttttcttctt ggccccactc tcctctttga gggctctctg agggcccagc
420
tccatggcgt cacagatgta tgtcagcaag ccattgctctc cgtcctctcc attctcgggg
480
gcagcctccc cgttggtggt cacttctcca gaagcaaact gttgatcagg cccaaacctg
540
agtgctgagc agtctcagtc tctccctcct gccaaagccgc cagggtccca ccctcaggct
600
ccctggtagg gaccgagggg ccgggcgctt gagccccgct caatcgccgc tttcgttgga
660
agcggtcggg gctgagcttg cgcagagtgt cgacctcccc aggcaccgcc ttctcgtgct
720
tccagctctg ctgcatctcg cgcagctttg ccgcagcctt gcgcttcaac ttggcgaacc
780
agcgtggtg gatcttgtag tcagtcattg tgcccacctc ccaggaccct gagcaggaca
840
caa
843

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<210> 1930

<211> 120

<212> PRT

<213> Homo sapiens

<400> 1930

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Leu Pro Gly Cys Ser Pro Gly Thr Cys Pro Ser Arg Arg Asn Thr Leu
1           5           10           15
Pro Gly Leu Gly Leu Gly Gln Gly Pro Ser Gly Pro Cys Leu Glu Cys
20           25           30
Pro Gln Gln Arg Leu Ala Ser Trp Tyr Tyr Leu Cys Gln Arg Thr Gln
35           40           45
Ala Pro Val Gln Pro Cys Leu Trp Ala Gly Ser Glu Pro Ala Pro Arg
50           55           60
Pro Arg Ala Pro Glu Ser His Arg Ser Gln Ala Arg Leu Ser Trp Gly
65           70           75           80
Cys Ser Phe Leu Lys Asn Gly Gly Phe Gly Leu Pro Ser Leu Thr Leu
85           90           95
Ala Ser Ala Pro Cys Leu Asp Ser Ser Ser Phe Phe Phe Phe Leu Ala

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100 105 110
 Pro Leu Ser Ser Leu Arg Ala Leu
 115 120

<210> 1931
 <211> 719
 <212> DNA
 <213> Homo sapiens

<400> 1931
 acgcgtaggc ctgagccgct ccacagccct ggggagggca gaaaaggagg aaagtaggca
 60
 gtgcaagaaa caggaggaaa cccccagag cgcagcctcc tggaagcgga agggagcact
 120
 gaagaggagg tggttagtgg tgtcagaagc tgctgagaag ccagttagat aaagcggaga
 180
 agcttcttac taggacagct tcctcccagc ccagtgtggc cacgctggtg tcctcgggtga
 240
 ccagacacgt ggccatgaat ttctcagtgt gctttattgt tgattaaatg cagtcggctc
 300
 acgaggctga ctttggaac aggaggtccg tgggtcgtgg aataagaaag ggcatcatgg
 360
 ttgcagagga aggaaggaa gccacggct gccttgggga gctttctgaa aggcaggctc
 420
 gatcatgct ctctgggcta cggctctctc acggtggctc ctggttgga ctgaagtgg
 480
 ccccttggtc cctctctccc atctcagcat tagccaggac ttttggttg ggggcccag
 540
 cagggtgcc ccttgcaac acttcttttc ccacatgac gtgccttcca aacctacttc
 600
 cagcgtgcc ctcttcaggg agcctttcat aaccacctct cccttcact ggctaaagat
 660
 gaggtgagc aactgcagga cttgggacct tgttcctgcc cctgtggctg cctggatcc
 719

<210> 1932
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1932
 Met Pro Leu Trp Ala Thr Val Ser Ser Arg Trp Leu Leu Val Gly Thr
 1 5 10 15
 Glu Val Val Pro Leu Val Pro Leu Ser His Leu Ser Ile Ser Gln Asp
 20 25 30
 Phe Trp Leu Gly Gly Pro Ser Arg Ala Ala Pro Leu Gln His Phe Phe
 35 40 45
 Ser His Met Ile Val Pro Ser Lys Pro Thr Ser Ser Val Ala Leu Phe
 50 55 60
 Arg Glu Pro Phe Ile Thr Thr Ser Pro Phe His Trp Leu Lys Met Arg
 65 70 75 80
 Leu Ser Asn Cys Arg Thr Trp Asp Leu Val Pro Ala Pro Val Ala Ala
 85 90 95
 Trp Ile

<210> 1933
 <211> 295
 <212> DNA
 <213> Homo sapiens .

<400> 1933
 ggcgccgagc tgtggggcggc catggagcgc atgcctgccg acctgattat cctcgacctg
 60
 atgctgccgg gggataacgg cctcttgctg tgccagcgcg tgcgccagca atacgcaaca
 120
 ccagtgatca tgctgaccgc catgggcgaa ctgagtgatc gcgtgggggg cctggaaatg
 180
 ggcgccgatg actacctgaa caaacctttc gatgcccggtg aattacttgc ccgggtgcgc
 240
 gctgtactgc gtccggcggtg tgaaaaccga ccgacgttgg gcgacgtgtc gcgcc
 295

<210> 1934
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 1934
 Gly Ala Glu Leu Trp Ala Ala Met Glu Arg Met Pro Ala Asp Leu Ile
 1 5 10 15
 Ile Leu Asp Leu Met Leu Pro Gly Asp Asn Gly Leu Leu Leu Cys Gln
 20 25 30
 Arg Leu Arg Gln Gln Tyr Ala Thr Pro Val Ile Met Leu Thr Ala Met
 35 40 45
 Gly Glu Leu Ser Asp Arg Val Gly Gly Leu Glu Met Gly Ala Asp Asp
 50 55 60
 Tyr Leu Asn Lys Pro Phe Asp Ala Arg Glu Leu Leu Ala Arg Val Arg
 65 70 75 80
 Ala Val Leu Arg Pro Ala Cys Glu Asn Arg Pro Thr Leu Gly Asp Val
 85 90 95
 Ser Arg

<210> 1935
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 1935
 accggtgtgg cgggcgcggc cttcaccacc atcggtcca ccgggccgac ggccgggttcg
 60
 caatacatcg tcgatacett cctggtagtg gtgttcgggg gggcccaaag cctgttcggc
 120
 cccatgcct cggcgttcgt gattgccag acccaatcgc tgcggagtt tttcctcagt
 180
 ggctcgatgg ccaagggtgct gacctgtcg tcggtgattc tgatcctgat gctgcgccg
 240

caagggttgt tctccatcaa agtgcgcaag taaaggcgag cagataaggg ttttaagca
298

<210> 1936
<211> 90
<212> PRT
<213> Homo sapiens

<400> 1936
Thr Gly Val Ala Gly Ala Ala Phe Thr Thr Ile Gly Ser Thr Gly Pro
1 5 10 15
Thr Ala Gly Ser Gln Tyr Ile Val Asp Thr Phe Leu Val Val Val Phe
20 25 30
Gly Gly Ala Gln Ser Leu Phe Gly Pro Ile Ala Ser Ala Phe Val Ile
35 40 45
Ala Gln Thr Gln Ser Leu Ser Glu Phe Phe Leu Ser Gly Ser Met Ala
50 55 60
Lys Val Leu Thr Leu Ser Ser Val Ile Leu Ile Leu Met Leu Arg Pro
65 70 75 80
Gln Gly Leu Phe Ser Ile Lys Val Arg Lys
85 90

<210> 1937
<211> 513
<212> DNA
<213> Homo sapiens

<400> 1937
gcacggcgca cagtaacacc aactcgaaag agaccttatg aatgcaaggt gtgcgggaaa
60
gcctttaatt ctcccaattt atttcaaata catcaaagaa ctcacactgg aaagagggtcc
120
tataaatgta gggaaatagt gagagccttc acagtttcca gtttctttcg aaaacatgga
180
aaaatgcata ctggagaaaa acgctatgaa tgtaataact gtggaaaacc tatcgattat
240
cccagtttat ttcaaattca tgtagaact cactctggag aaaaacccta caaatgtaaa
300
caatgtggta aagccttcat ttccgcaggt tacgttcgga cacatgaaat cagatctcac
360
gcgctggaga aatcccacca atgtcaggaa tgtgggaaga aactcagttg ttccagttcc
420
cttcacagac atgaaagaac tcatagtggg ggaaaactct acgaatgtca aaaatgtgac
480
caagtcttta gatgtccac gtcccttcac gcg
513

<210> 1938
<211> 171
<212> PRT
<213> Homo sapiens

<400> 1938
Ala Arg Arg Thr Val Thr Pro Thr Arg Lys Arg Pro Tyr Glu Cys Lys

1	5	10	15
Val Cys Gly Lys	Ala Phe Asn Ser	Pro Asn Leu Phe	Gln Ile His Gln
20	25	30	
Arg Thr His Thr	Gly Lys Arg Ser	Tyr Lys Cys Arg	Glu Ile Val Arg
35	40	45	
Ala Phe Thr Val	Ser Ser Phe Phe	Arg Lys His Gly	Lys Met His Thr
50	55	60	
Gly Glu Lys Arg	Tyr Glu Cys Lys	Tyr Cys Gly Lys	Pro Ile Asp Tyr
65	70	75	80
Pro Ser Leu Phe	Gln Ile His Val	Arg Thr His Ser	Gly Glu Lys Pro
85	90	95	
Tyr Lys Cys Lys	Gln Cys Gly Lys	Ala Phe Ile Ser	Ala Gly Tyr Val
100	105	110	
Arg Thr His Glu	Ile Arg Ser His	Ala Leu Glu Lys	Ser His Gln Cys
115	120	125	
Gln Glu Cys Gly	Lys Lys Leu Ser	Cys Ser Ser Ser	Leu His Arg His
130	135	140	
Glu Arg Thr His	Ser Gly Gly Lys	Leu Tyr Glu Cys	Gln Lys Cys Asp
145	150	155	160
Gln Val Phe Arg	Cys Pro Thr Ser	Leu His Ala	
165	170		

<210> 1939

<211> 1233

<212> DNA

<213> Homo sapiens

<400> 1939

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gccggcagcg cgcctcccca gggagggagt ccgcagcctg aggtcttctc caagaaaaaa
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aaagaaaaaa aaacaacatg gctgcaaagg agaaactgga ggcagtgtta aatgtggccc
120
tgaggggtgcc aagcatcatg ctgttgatg tctgtacag atgggatgtc agctcctttt
180
tccagcagat ccaaagaagt agccttagta ataaccctct tttccagtat aagtatttgg
240
ctcttaatat gcattatgta gggtatatct taagtgtggt gctgctaaca ttgcccaggc
300
agcatctggt tcagctttat ctatatTTTT tgactgctct gtcctctat gctggacatc
360
aaatttccag ggactatgtt cggagtgaac tggggtttgc ctatgaggga ccaatgtatt
420
tagaacctct ctctatgaat cgggtttacca cagccttaat aggtcagttg gtgggtgtgta
480
ctttatgctc ctgtgtcatg aaaacaaagc agatttggct gttttcagct cacatgcttc
540
ctctgctagc acgactctgc cttgttcctt tggagacaat tgctatcatc aataaatttg
600
ctatgatttt tactggattg gaagttctct attttcttgg gtctaattct ttggtacctt
660
ataaccttgc taaatctgca tacagagaat tgggttcagg agtggaggta tatggccttc
720
tcgccttggg aatgtccctg tggaatcaac tggtagtccc tgttcttttc atgggtttct
780

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ggctcgtctt atttgccttt cagatttact cctatttcag tactcgagat cagcctgcat
 840
 cacgtgagag gcttcttttc ctttttctga caaggtaatt aataagagcc tatgatacta
 900
 tatataacct tagaaagaga aaactttgat ctaggaatag taagttttgc agattacttt
 960
 tatcgttcat gttacacaac ttctgtatttt gttaagatag gattttcatt cactggatac
 1020
 ctaggttttg caatgcagag aggtgctaac ataataatgt ggtttatttg gctgcactat
 1080
 ggaccagagt gtagcaaatg atttgtggaa aggtacatag cacatcgtaa aagtattttt
 1140
 tcaatttcaa gttaaaatta ttgggtcaat cagaaaaaag tatattataa aaataacatt
 1200
 tattgagtat tttaaagtga ccataccatt naa
 1233

<210> 1940

<211> 266

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Ala	Ala	Lys	Glu	Lys	Leu	Glu	Ala	Val	Leu	Asn	Val	Ala	Leu	Arg
1				5					10					15	
Val	Pro	Ser	Ile	Met	Leu	Leu	Asp	Val	Leu	Tyr	Arg	Trp	Asp	Val	Ser
			20					25					30		
Ser	Phe	Phe	Gln	Gln	Ile	Gln	Arg	Ser	Ser	Leu	Ser	Asn	Asn	Pro	Leu
			35				40						45		
Phe	Gln	Tyr	Lys	Tyr	Leu	Ala	Leu	Asn	Met	His	Tyr	Val	Gly	Tyr	Ile
			50				55					60			
Leu	Ser	Val	Val	Leu	Leu	Thr	Leu	Pro	Arg	Gln	His	Leu	Val	Gln	Leu
						70					75				80
Tyr	Leu	Tyr	Phe	Leu	Thr	Ala	Leu	Leu	Leu	Tyr	Ala	Gly	His	Gln	Ile
				85						90				95	
Ser	Arg	Asp	Tyr	Val	Arg	Ser	Glu	Leu	Gly	Phe	Ala	Tyr	Glu	Gly	Pro
			100					105					110		
Met	Tyr	Leu	Glu	Pro	Leu	Ser	Met	Asn	Arg	Phe	Thr	Thr	Ala	Leu	Ile
			115					120					125		
Gly	Gln	Leu	Val	Val	Cys	Thr	Leu	Cys	Ser	Cys	Val	Met	Lys	Thr	Lys
			130				135					140			
Gln	Ile	Trp	Leu	Phe	Ser	Ala	His	Met	Leu	Pro	Leu	Leu	Ala	Arg	Leu
					150					155					160
Cys	Leu	Val	Pro	Leu	Glu	Thr	Ile	Ala	Ile	Ile	Asn	Lys	Phe	Ala	Met
				165					170					175	
Ile	Phe	Thr	Gly	Leu	Glu	Val	Leu	Tyr	Phe	Leu	Gly	Ser	Asn	Leu	Leu
			180					185					190		
Val	Pro	Tyr	Asn	Leu	Ala	Lys	Ser	Ala	Tyr	Arg	Glu	Leu	Val	Gln	Val
			195				200						205		
Val	Glu	Val	Tyr	Gly	Leu	Leu	Ala	Leu	Gly	Met	Ser	Leu	Trp	Asn	Gln
			210				215					220			
Leu	Val	Val	Pro	Val	Leu	Phe	Met	Val	Phe	Trp	Leu	Val	Leu	Phe	Ala
				230						235					240
Leu	Gln	Ile	Tyr	Ser	Tyr	Phe	Ser	Thr	Arg	Asp	Gln	Pro	Ala	Ser	Arg

245 250 255
 Glu Arg Leu Leu Phe Leu Phe Leu Thr Arg
 260 265
 <210> 1941
 <211> 411
 <212> DNA
 <213> Homo sapiens
 <400> 1941
 ctggggccct gcccacagc atcatgatgg ggaaactccc cctgggggtc gtctcccctt
 60
 atgtgaagat gagttcgggg ggctacacgg accccctgaa attctacgcc accagctact
 120
 gcacagccta cggtcgggag gatttcaagc cccgtgtggg cagtcacgta ggcaccggct
 180
 acaaatcaaa tttccagccc gtggtctcat gccaaagccag tctggaggcc ttagacaacc
 240
 cggccagggg ggaacaagcc caggaccatt tccagtctgt ggccagccag agctaccgcc
 300
 ccctggaggt gcctgacggc aagcatcccc tgccctggag catgcgccag accagctcag
 360
 gctatgggcg ggagaagccc agtgcggggc cccccaccaa ggaggtccgg a
 411

<210> 1942
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 1942
 Met Met Gly Lys Leu Pro Leu Gly Val Val Ser Pro Tyr Val Lys Met
 1 5 10 15
 Ser Ser Gly Gly Tyr Thr Asp Pro Leu Lys Phe Tyr Ala Thr Ser Tyr
 20 25 30
 Cys Thr Ala Tyr Gly Arg Glu Asp Phe Lys Pro Arg Val Gly Ser His
 35 40 45
 Val Gly Thr Gly Tyr Lys Ser Asn Phe Gln Pro Val Val Ser Cys Gln
 50 55 60
 Ala Ser Leu Glu Ala Leu Asp Asn Pro Ala Arg Gly Glu Gln Ala Gln
 65 70 75 80
 Asp His Phe Gln Ser Val Ala Ser Gln Ser Tyr Arg Pro Leu Glu Val
 85 90 95
 Pro Asp Gly Lys His Pro Leu Pro Trp Ser Met Arg Gln Thr Ser Ser
 100 105 110
 Gly Tyr Gly Arg Glu Lys Pro Ser Ala Gly Pro Pro Thr Lys Glu Val
 115 120 125
 Arg

<210> 1943
 <211> 386
 <212> DNA
 <213> Homo sapiens

<400> 1943

nagaaacatt cagggctcca acaggggtgga aaacatgagg ctgcaggatg tttaacagga
60
gtcttttgctg cagctcctct tggagccttt aacgagatac tatcatgcct atgaactgcc
120
acacagatgt acatggcata gcactgcccc aaagtatcag cccaaggaac cctactttcc
180
ccagcaacat ctaactcaga aatgctgata tttggcctca atctgggtccc aaaatacctc
240
caggggtatct tgggcttcgg tgtgttcaca cacttgggtca tgtaaactctg aacacagact
300
ctctctgcct tggcaagaac cccccacacc cccatagata attacaccct ttggttctcc
360
ctctgcaatc tcacctgcta gagacg
386

<210> 1944

<211> 111

<212> PRT

<213> Homo sapiens

<400> 1944

Met	Gly	Val	Trp	Gly	Val	Leu	Ala	Lys	Ala	Glu	Arg	Val	Cys	Val	Gln
1				5					10				15		
Ile	Tyr	Met	Thr	Lys	Cys	Val	Asn	Thr	Pro	Lys	Pro	Lys	Ile	Pro	Trp
			20					25					30		
Arg	Tyr	Phe	Gly	Thr	Arg	Leu	Arg	Pro	Lys	Ile	Ser	Ile	Ser	Glu	Leu
			35				40					45			
Asp	Val	Ala	Gly	Glu	Ser	Arg	Val	Pro	Trp	Ala	Asp	Thr	Phe	Gly	Gln
			50			55					60				
Cys	Tyr	Ala	Met	Tyr	Ile	Cys	Val	Ala	Val	His	Arg	His	Asp	Ser	Ile
65					70					75				80	
Ser	Leu	Lys	Ala	Pro	Arg	Gly	Ala	Ala	Ala	Lys	Thr	Pro	Val	Lys	His
				85					90					95	
Pro	Ala	Ala	Ser	Cys	Phe	Pro	Pro	Cys	Trp	Ser	Pro	Glu	Cys	Phe	
			100					105					110		

<210> 1945

<211> 443

<212> DNA

<213> Homo sapiens

<400> 1945

nacgcgtcac gaagcgcgct cggccacgt ggctccaagg gcgtccacgc gcccctctc
60
gaccgattgg tgtcgaacat ggcacggtgg catgcgacgc gcaccaagat ccagctcaag
120
ctcgcgatcc agcgantcgg catgctacag gagaaaaaag ccgcactgca taaaaaagtg
180
cgactggaaa ttgcggacnn tcgtagacgc caaaagcttg aatctgcgcg cgtaaaaacc
240
gaatcgctga tcatggacga tatacatttg gagttgcttg aactgcttga gctctactgt
300

gagacactct atgccagatt cggattacta gaaggacgcg acaatgagcc tgatgatgcg
 360
 atccgcgagc cgatgatcgc cattattcat gcggtcatc gcacagaggt gaaggaacta
 420
 catgtgctcc aaaacatgct gaa
 443

<210> 1946

<211> 147

<212> PRT

<213> Homo sapiens

<400> 1946

Xaa	Ala	Ser	Arg	Ser	Ala	Leu	Gly	Pro	Arg	Gly	Ser	Lys	Gly	Val	His
1				5				10					15		
Ala	Pro	Leu	Leu	Asp	Arg	Leu	Val	Ser	Asn	Met	Ala	Arg	Trp	His	Ala
		20						25				30			
Thr	Arg	Thr	Lys	Ile	Gln	Leu	Lys	Leu	Ala	Ile	Gln	Arg	Xaa	Gly	Met
		35				40						45			
Leu	Gln	Glu	Lys	Lys	Ala	Ala	Leu	His	Lys	Lys	Val	Arg	Leu	Glu	Ile
	50				55						60				
Ala	Asp	Xaa	Arg	Arg	Arg	Gln	Lys	Leu	Glu	Ser	Ala	Arg	Val	Lys	Thr
65				70					75					80	
Glu	Ser	Leu	Ile	Met	Asp	Asp	Ile	His	Leu	Glu	Leu	Leu	Glu	Leu	Leu
			85					90					95		
Glu	Leu	Tyr	Cys	Glu	Thr	Leu	Tyr	Ala	Arg	Phe	Gly	Leu	Leu	Glu	Gly
		100						105				110			
Arg	Asp	Asn	Glu	Pro	Asp	Asp	Ala	Ile	Arg	Glu	Pro	Met	Ile	Ala	Ile
		115					120					125			
Ile	His	Ala	Ala	His	Arg	Thr	Glu	Val	Lys	Glu	Leu	His	Val	Leu	Gln
	130					135					140				
Asn	Met	Leu													
145															

<210> 1947

<211> 472

<212> DNA

<213> Homo sapiens

<400> 1947

cggccgtgta ggccgtgacg gtgaccaaca gagccacagc gggcccgtg taggcgggag
 60
 gactgtgccg caggtgcagg agggtcagat ggaaacaaaa ggcgcaggcg gcctccacaa
 120
 gcgccccgtg gggcacggat gtgcgcaggg ccgagctgca gctctgggcc atgaggetct
 180
 gcagcagggtg caggtcactg agctcccagg cccagcagag gcgcgtcagg gtgcaggcgg
 240
 cctgcatgcc cagcccctgt gccgccagct tcagcagcgt gccaggcaga gactcctcgg
 300
 ccatgaggaa ctctgcagg gacacggtgg ggttggccga ggccccgtcc aaggtgacct
 360
 cgtgcgccag gaagagcagg aagagcaggg ttagcagcag gtcaggccca aagtccccag
 420

cccagggccc gagctcgaac agcgtcctca tctccaggaa gcaggccccc ag
472

<210> 1948
<211> 150
<212> PRT
<213> Homo sapiens

<400> 1948
Met Arg Thr Leu Phe Glu Leu Gly Pro Trp Ala Gly Asp Phe Gly Pro
1 5 10 15
Asp Leu Leu Leu Thr Leu Leu Phe Leu Leu Phe Leu Ala His Gly Val
20 25 30
Thr Leu Asp Gly Ala Ser Ala Asn Pro Thr Val Ser Leu Gln Glu Phe
35 40 45
Leu Met Ala Glu Glu Ser Leu Pro Gly Thr Leu Leu Lys Leu Ala Ala
50 55 60
Gln Gly Leu Gly Met Gln Ala Ala Cys Thr Leu Thr Arg Leu Cys Trp
65 70 75 80
Ala Trp Glu Leu Ser Asp Leu His Leu Leu Gln Ser Leu Met Ala Gln
85 90 95
Ser Cys Ser Ser Ala Leu Arg Thr Ser Val Pro His Gly Ala Leu Val
100 105 110
Glu Ala Ala Cys Ala Phe Cys Phe His Leu Thr Leu Leu His Leu Arg
115 120 125
His Ser Pro Pro Ala Tyr Ser Gly Pro Ala Val Ala Leu Leu Val Thr
130 135 140
Val Thr Ala Tyr Thr Ala
145 150

<210> 1949
<211> 395
<212> DNA
<213> Homo sapiens

<400> 1949
acgcgttgag ggagggcgaca tgcttcatga gcgcttggcg ccaactgctca agcgacatct
60
gcccttggct gatgttgcaa ggcggacagg acggcatgta attcgactcg acgtcacgct
120
ccggatgcct cgacggggacg ctcacaagct tccattggcc attcgcggggt cgcttggtct
180
cgaccgcgcg tacaaccggg tctacatggt cgccatgccca ccgatcgggc aatggcattc
240
cacagtacgc gcagcgggccc tcgtatttgc gccggagccg atcgcgctgt gctttcgtea
300
gccggctcac gctttatgct ccacggcagg tgtggcagca tcttggcagg cgactccaag
360
atccgcgcct gcgtccagct tgacggcgcc ggggt
395

<210> 1950
<211> 125
<212> PRT

<213> Homo sapiens

<400> 1950

```

Met Leu His Glu Arg Leu Ala Pro Leu Leu Lys Arg His Leu Pro Leu
 1           5           10           15
Ala Asp Val Ala Arg Arg Thr Gly Arg His Val Ile Arg Leu Asp Val
          20           25           30
Thr Leu Arg Met Pro Arg Arg Asp Ala His Lys Leu Pro Leu Ala Ile
          35           40           45
Arg Gly Ser Leu Gly Leu Asp Arg Ala Tyr Asn Arg Val Tyr Met Val
          50           55           60
Ala Met Pro Pro Ile Gly Gln Trp His Ser Thr Val Arg Ala Ala Ala
65           70           75           80
Val Val Phe Ala Pro Glu Pro Ile Ala Leu Cys Phe Arg Gln Pro Ala
          85           90           95
His Ala Leu Cys Ser Thr Ala Gly Val Ala Ala Ser Trp Gln Ala Thr
          100          105          110
Pro Arg Ser Ala Pro Ala Ser Ser Leu Thr Ala Pro Gly
          115          120          125

```

<210> 1951

<211> 363

<212> DNA

<213> Homo sapiens

<400> 1951

```

cggccgcgcg ctctccgctc ccgggcccc gccgccaccg cgccccccgc gggagatgga
60
acagcgggaac cggctcggtg cctcgggata cctgccgect ctgctgctgc atgcoctgct
120
gctcttcgtg gccgacgctg cattcacaga agtccccaaa gatgtgacag tacgggaggg
180
agacgacatc gaaatgccct gcgcgttcg gccagcgga gccacctcgt attcgttgga
240
gattcagtgg tggtagctca aggagccacc ccgggagctg ctgcacgagc tggcgctcag
300
cgtgccgggc gcccgagca aggtaacaaa taaggatgca actaaaatca gcaccgtacg
360
cgt
363

```

<210> 1952

<211> 110

<212> PRT

<213> Homo sapiens

<400> 1952

```

Arg Pro Pro Pro Leu Arg Ser Arg Ala Pro Ala Ala Thr Ala Pro Pro
 1           5           10           15
Ala Gly Asp Gly Thr Ala Glu Pro Ala Arg Cys Pro Arg Ile Pro Ala
          20           25           30
Ala Ser Ala Ala Ala Cys Pro Ala Ala Leu Arg Gly Arg Arg Cys Ile
          35           40           45
His Arg Ser Pro Gln Arg Cys Asp Ser Thr Gly Gly Arg Arg His Arg

```

```

      50              55              60
Asn Ala Leu Arg Val Pro Gly Gln Arg Ser His Leu Val Phe Ala Gly
65              70              75              80
Asp Ser Val Val Val Pro Gln Gly Ala Thr Pro Gly Ala Ala Ala Arg
      85              90              95
Ala Gly Ala Gln Arg Ala Gly Arg Pro Glu Gln Gly Asn Lys
      100              105              110

```

<210> 1953
 <211> 329
 <212> DNA
 <213> Homo sapiens

```

<400> 1953
acgcgtcagc ctgagcccaa taactataaa agagtcgcaa ccatgactgt gctattgagt
60
gagcgcagcc agattttccg ggggtgccgat gcctacgcgg tgcgggacta cgtcaaccag
120
catgtgggca gccactgcat tcgcctgcct cccaagggcc ggccacgggc gagtatcagc
180
catcgcacct ttgccagcct ggacctgtgc cgcacagct acggcgctcc ggtacgggtc
240
acatcggtgg cgctggagac catctatcac ctgcagatcc tgttgagcgg gcattgccgc
300
tccagctccc gtggtgagga tgacgtggn
329

```

<210> 1954
 <211> 109
 <212> PRT
 <213> Homo sapiens

```

<400> 1954
Thr Arg Gln Pro Glu Pro Asn Asn Tyr Lys Arg Val Ala Thr Met Thr
1      5      10      15
Val Leu Leu Ser Glu Arg Ser Gln Ile Phe Arg Gly Ala Asp Ala Tyr
      20      25      30
Ala Val Ser Asp Tyr Val Asn Gln His Val Gly Ser His Cys Ile Arg
      35      40      45
Leu Pro Pro Lys Gly Arg Pro Arg Ala Ser Ile Ser His Arg Thr Phe
      50      55      60
Ala Ser Leu Asp Leu Cys Arg Ile Ser Tyr Gly Ala Pro Val Arg Val
65      70      75      80
Thr Ser Val Ala Leu Glu Thr Ile Tyr His Leu Gln Ile Leu Leu Ser
      85      90      95
Gly His Cys Arg Ser Ser Ser Arg Gly Glu Asp Asp Val
      100      105

```

<210> 1955
 <211> 415
 <212> DNA
 <213> Homo sapiens

<400> 1955

acgcgtggct cgacgaaaac caagtacgag acatgcccgga caaggtacta tcacacatgg
60
tggaatactg ctggggggcgc ttcacagaca acatcaaata cgctgtagct gcccaatatt
120
ggaaagggcc acacaagccc gatagtgacc atcaacggat cattgtaggc tatttcaaaa
180
ccgccaaca agccatgaac gcagcaaac aattccactg gaacacccgg ctacaacaac
240
aatggaaaac atggatactc ccagtccaca acggcaccgt gtccgagttt ttcacccaac
300
aaaaaacttt gctagacgag caagacgata gcaatagcga gctgccggag catctacaaa
360
acgtcatgtg cggcaaaaaca ctccaccacc aagacgacac catatcgtgg tgcac
415

<210> 1956

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1956

Met	Pro	Asp	Lys	Val	Leu	Ser	His	Met	Val	Glu	Tyr	Cys	Trp	Gly	Arg
1				5					10					15	
Phe	Thr	Asp	Asn	Ile	Lys	Tyr	Ala	Val	Ala	Ala	Gln	Tyr	Trp	Lys	Gly
			20					25					30		
Pro	His	Lys	Pro	Asp	Ser	Asp	His	Gln	Arg	Ile	Ile	Val	Gly	Tyr	Phe
		35					40					45			
Lys	Thr	Ala	Lys	Gln	Ala	Met	Asn	Ala	Ala	Lys	Gln	Phe	His	Trp	Asn
	50					55					60				
Thr	Arg	Leu	Gln	Gln	Gln	Trp	Lys	Thr	Trp	Ile	Leu	Pro	Val	His	Asn
65					70					75				80	
Gly	Thr	Val	Ser	Glu	Phe	Phe	Thr	Gln	Gln	Lys	Thr	Leu	Leu	Asp	Glu
			85						90					95	
Gln	Asp	Asp	Ser	Asn	Ser	Glu	Leu	Pro	Glu	His	Leu	Gln	Asn	Val	Met
			100					105				110			
Cys	Gly	Lys	Thr	Leu	His	His	Gln	Asp	Asp	Thr	Ile	Ser	Trp	Cys	
		115					120					125			

<210> 1957

<211> 526

<212> DNA

<213> Homo sapiens

<400> 1957

acgcgttccg gagagatttt cctaacctct ctccgagctg ctgagccgat cgggtgaccac
60
caggagctcc tcctgtgag gacaaagttc cagagtcggg gtcacggggc ttacttattg
120
gggaggaggc ccgcccgggc cgcagtgggc gaggggccct tggcgcgctc ctgggaggtc
180
agacctggca cagtgtggcg aaggtttcca gtgcgatccc gagtcgaggg cgcatttcgc
240
ggtgactgcc agcatgaacc gcagccgacc gagttctgcg atcgggcttc tccgcagagt
300

ggggaccctg gggaaggcgc caacttctct cctctgcca cctcactccc cgcgggcgctc
 360
 cctggggcgc ctgcccgggc cgcactgggc ggctccatc gtcccttccc tctacctgca
 420
 ctgccccagg cgggagagag gccttgcccc nncgaggac cagctgcage gggcagcggg
 480
 gtctgtctcc cccaaccccc gcccatggc acggggctga accggt
 526

<210> 1958

<211> 175

<212> PRT

<213> Homo sapiens

<400> 1958

Thr	Arg	Ser	Gly	Glu	Ile	Phe	Leu	Thr	Ser	Leu	Arg	Ala	Ala	Glu	Pro
1				5				10						15	
Ile	Gly	Asp	His	Gln	Glu	Leu	Leu	Pro	Val	Arg	Thr	Lys	Phe	Gln	Ser
			20					25					30		
Arg	Gly	His	Gly	Pro	Tyr	Leu	Leu	Gly	Arg	Arg	Pro	Ala	Gly	Ala	Ala
		35					40					45			
Val	Gly	Glu	Gly	Pro	Leu	Ala	Arg	Ser	Trp	Glu	Val	Arg	Pro	Gly	Thr
	50					55				60					
Val	Trp	Arg	Arg	Phe	Pro	Val	Arg	Ser	Arg	Val	Glu	Gly	Ala	Phe	Arg
65				70					75					80	
Gly	Asp	Cys	Gln	His	Glu	Pro	Gln	Pro	Thr	Glu	Phe	Cys	Asp	Arg	Ala
			85						90				95		
Ser	Pro	Gln	Ser	Gly	Asp	Pro	Gly	Glu	Gly	Ala	Asn	Phe	Ser	Pro	Leu
		100					105					110			
Pro	Thr	Ser	Leu	Pro	Ala	Gly	Val	Pro	Gly	Pro	Pro	Ala	Arg	Ala	Ala
		115					120					125			
Leu	Gly	Gly	Leu	His	Arg	Pro	Phe	Pro	Leu	Pro	Ala	Leu	Pro	Gln	Ala
	130					135					140				
Gly	Glu	Arg	Pro	Trp	Pro	Xaa	Glu	Gly	Pro	Ala	Ala	Ala	Gly	Ser	Gly
145					150				155					160	
Val	Leu	Leu	Pro	Gln	Pro	Pro	Pro	His	Gly	Thr	Gly	Leu	Asn	Arg	
			165					170					175		

<210> 1959

<211> 378

<212> DNA

<213> Homo sapiens

<400> 1959

gtgcaccgga cggctcctcc aacggatcat gcgacggccc agcgggaaggc tcacccgagt
 60
 cgtcagaagg atcagggcgc ttgtcgtcgt cagacttcag gacatcccac gacatggtga
 120
 acggctggga ggagaccttg tccccgtcgg tcttggcgcc gacaacaaca ccgctcatgg
 180
 tgtattttcc ggcattgagt aagaaccagt gggcatgctg atgacccttg atcggcagtg
 240
 aggtcctttt gaccacctga tatgtgtcat cagcgaggaa ggtgccgagt ttggcgttct
 300

cgtctgcctc gggatgaattg ccgaggaggt acatcttgcc tggacccgta atcgcggtga
 360
 agtcgacgcg caacgcgt
 378

<210> 1960
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Met Tyr Leu Leu Gly Asn Ser Pro Glu Ala Asp Glu Asn Ala Lys Leu
 1 5 10 15
 Gly Thr Phe Leu Ala Asp Asp Thr Tyr Gln Val Val Lys Gly Ala Ser
 20 25 30
 Leu Pro Ile Lys Gly His Gln His Ala His Trp Phe Phe Thr His Ala
 35 40 45
 Gly Lys Tyr Thr Met Ser Gly Val Val Val Gly Ala Lys Thr Asp Gly
 50 55 60
 Asp Lys Val Ser Ser Gln Pro Phe Thr Met Ser Trp Asp Val Leu Lys
 65 70 75 80
 Ser Asp Asp Asp Lys Arg Pro Asp Pro Ser Asp Asp Ser Gly Glu Pro
 85 90 95
 Ser Ala Gly Pro Ser His Asp Pro Leu Glu Glu Pro Ser Gly Ala
 100 105 110

<210> 1961
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1961
 ggatccaccc cggaaaccgg caggatgaag ggggcaagtg aggagaagct ggcattctgtg
 60
 tccaacctgg tcaactgtgtt tgagaatagc aggacccag aagcagcacc cagaggccag
 120
 aggctagagg acgtgcatca ccgccctgag tgcaggcctc ccgagtcacc aggaccacgg
 180
 gagaagacga atgtcgggga ggccgtgggg tctgagccca ggacagtcag caggagggtac
 240
 ctgaactccc tgaagaacaa gctgtccagc gaagcctgga ggaaatcttg ccagcctgtg
 300
 accctctcag gatcggggac gcaggagcca gagaagaaga tcgtccagga gctgctggag
 360
 acagagcagg cctatgtggc gcgc
 384

<210> 1962
 <211> 128
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Gly Ser Thr Pro Glu Thr Gly Arg Met Lys Gly Ala Ser Glu Glu Lys

```

      1             5             10             15
Leu Ala Ser Val Ser Asn Leu Val Thr Val Phe Glu Asn Ser Arg Thr
      20             25             30
Pro Glu Ala Ala Pro Arg Gly Gln Arg Leu Glu Asp Val His His Arg
      35             40             45
Pro Glu Cys Arg Pro Pro Glu Ser Pro Gly Pro Arg Glu Lys Thr Asn
      50             55             60
Val Gly Glu Ala Val Gly Ser Glu Pro Arg Thr Val Ser Arg Arg Tyr
65             70             75             80
Leu Asn Ser Leu Lys Asn Lys Leu Ser Ser Glu Ala Trp Arg Lys Ser
      85             90             95
Cys Gln Pro Val Thr Leu Ser Gly Ser Gly Thr Gln Glu Pro Glu Lys
      100            105            110
Lys Ile Val Gln Glu Leu Leu Glu Thr Glu Gln Ala Tyr Val Ala Arg
      115            120            125

```

<210> 1963
 <211> 323
 <212> DNA
 <213> Homo sapiens

```

<400> 1963
nnncccttcc taccctccca tactcccccac ccctcttccct cccctgtgc tgagcttgca
60
ggcatgaaac acccaactgg cctctctccc tctgttttgc ccttctgtc gtctctctcc
120
cacagctgcc tggctcttcg gcgtcagtc accaccttct gcagctctcc ctcacctgg
180
cgaccactca ggcatgcac tcgcggggccc ccttcagacc tctcgggggc atcttccct
240
tcctgggcca ttatcttct tcatctgggc tgggcccgga gggcggttcc ccccttcc
300
cttcttctt ttttttctc ttt
323

```

<210> 1964
 <211> 107
 <212> PRT
 <213> Homo sapiens

```

<400> 1964
Xaa Pro Phe Leu Pro Ser His Thr Pro His Pro Ser Ser Ser Pro Cys
      1             5             10             15
Ala Glu Leu Ala Gly Met Lys His Pro Pro Gly Leu Ser Pro Ser Val
      20             25             30
Leu Pro Leu Leu Ser Ser Leu Ser His Ser Cys Leu Ala Leu Arg Arg
      35             40             45
Gln Ser Thr Thr Phe Cys Ser Ser Pro Ser Pro Trp Arg Pro Leu Arg
      50             55             60
His Ala Ser Arg Gly Pro Pro Ser Asp Leu Ser Gly Ser Ser Ser Pro
65             70             75             80
Ser Leu Ala Ile Ile Phe Leu His Leu Gly Trp Ala Arg Arg Gly Val
      85             90             95
Pro Pro Leu Pro Leu Leu Ser Phe Phe Phe Ser

```

100

105

<210> 1965

<211> 1416

<212> DNA

<213> Homo sapiens

<400> 1965

cggctggggc aggagctgga cgacgccacc atggacctgg agcagcagcg gcagcttggtg
 60
 agcaccttgg agaagaagca gcgcaagttt gaccagcttc tggcagagga gaaggcagct
 120
 gtacttcggg cagtggagga acgtgagcgg gccgaggcag agggccggga gcgtgaggct
 180
 cgggccctgt cactgacacg ggcaactggag gaggagcagg aggcacgtga ggagctggag
 240
 cggcagaacc gggccctgcg ggctgagctg gaggcactgc tgagcagcaa ggatgacgtc
 300
 ggcaagagcg tgcattgagct ggaacgagcc tgccgggtag cagaacaggc agccaatgat
 360
 ctgcgagcac aggtgacaga actggaggat gagctgacag cggccgagga tgccaagctg
 420
 cgtctggagg tgactgtgca ggctctcaag actcagcatg agcgtgacct gcagggccgt
 480
 gatgaggctg gtgaagagag gcggaggcag ctggccaagc agctgagaga tgcagaggtg
 540
 gacgggatg aggagcggaa gcagcgccact ctggccgtgg ctgcccgcaa gaagctggag
 600
 ggagagctgg aggagctgaa ggctcagatg gcctctgccg gccagggcaa ggaggaggcg
 660
 gtgaagcagc ttcgcaagat gcaggcccag atgaaggagc tatggcggga ggtggaggag
 720
 acacgcacct cccgggagga gatcttctcc cagaatcggg aaagtgaaaa gcgcctcaag
 780
 ggcttgaggc ctgagggtgt gcggctgcag gaggaactgg ccgcctcgga ccgtgctcgg
 840
 cggcaggccc agcaggaccg ggatgagatg gcagatgagg tggccaatgg taaccttagc
 900
 aaggcagcca ttctggagga gaagcgtcag ctggaggggc gcctggggca gttggaggaa
 960
 gagctggagg aggagcagac anactcagag ctgctcaatg accgctaccg caagctgctc
 1020
 ctgcaggtag agtcaactgac cacagagctg tcagctgagc gcagtttctc agccaaggca
 1080
 gagagcgggc ggcagcagct ggaacggcag atccaggagc tacggggacg cctgggtgag
 1140
 gaggatgctg gggcccgctc ccgccacaag atgaccattg ctgcccttga gtctaagttg
 1200
 gcccaggctg aggagcagct agagcaagag accagagagc gcatcctctc tggaaagctg
 1260
 gtgccccaaa gtaagaagcg gtttaaagag gtggtgctcc aggtggagga ggagcggagg
 1320
 gtggctgacc agctccggga ccagctggag aagggaacc ttcgagtcaa gcagctgaag
 1380

cggcagctgg aggaggccga ggaggaggca tcccgg
1416

<210> 1966

<211> 472

<212> PRT

<213> Homo sapiens

<400> 1966

Arg	Leu	Gly	Gln	Glu	Leu	Asp	Asp	Ala	Thr	Met	Asp	Leu	Glu	Gln	Gln
1				5					10					15	
Arg	Gln	Leu	Val	Ser	Thr	Leu	Glu	Lys	Lys	Gln	Arg	Lys	Phe	Asp	Gln
			20					25					30		
Leu	Leu	Ala	Glu	Glu	Lys	Ala	Ala	Val	Leu	Arg	Ala	Val	Glu	Glu	Arg
		35					40					45			
Glu	Arg	Ala	Glu	Ala	Glu	Gly	Arg	Glu	Arg	Glu	Ala	Arg	Ala	Leu	Ser
	50					55					60				
Leu	Thr	Arg	Ala	Leu	Glu	Glu	Glu	Gln	Glu	Ala	Arg	Glu	Glu	Leu	Glu
65					70					75					80
Arg	Gln	Asn	Arg	Ala	Leu	Arg	Ala	Glu	Leu	Glu	Ala	Leu	Leu	Ser	Ser
			85						90					95	
Lys	Asp	Asp	Val	Gly	Lys	Ser	Val	His	Glu	Leu	Glu	Arg	Ala	Cys	Arg
			100					105						110	
Val	Ala	Glu	Gln	Ala	Ala	Asn	Asp	Leu	Arg	Ala	Gln	Val	Thr	Glu	Leu
		115					120					125			
Glu	Asp	Glu	Leu	Thr	Ala	Ala	Glu	Asp	Ala	Lys	Leu	Arg	Leu	Glu	Val
	130						135					140			
Thr	Val	Gln	Ala	Leu	Lys	Thr	Gln	His	Glu	Arg	Asp	Leu	Gln	Gly	Arg
145					150					155					160
Asp	Glu	Ala	Gly	Glu	Glu	Arg	Arg	Arg	Gln	Leu	Ala	Lys	Gln	Leu	Arg
			165						170					175	
Asp	Ala	Glu	Val	Glu	Arg	Asp	Glu	Glu	Arg	Lys	Gln	Arg	Thr	Leu	Ala
			180					185					190		
Val	Ala	Ala	Arg	Lys	Lys	Leu	Glu	Gly	Glu	Leu	Glu	Glu	Leu	Lys	Ala
		195					200					205			
Gln	Met	Ala	Ser	Ala	Gly	Gln	Gly	Lys	Glu	Glu	Ala	Val	Lys	Gln	Leu
	210					215						220			
Arg	Lys	Met	Gln	Ala	Gln	Met	Lys	Glu	Leu	Trp	Arg	Glu	Val	Glu	Glu
225					230					235					240
Thr	Arg	Thr	Ser	Arg	Glu	Glu	Ile	Phe	Ser	Gln	Asn	Arg	Glu	Ser	Glu
			245						250					255	
Lys	Arg	Leu	Lys	Gly	Leu	Glu	Ala	Glu	Val	Leu	Arg	Leu	Gln	Glu	Glu
		260					265						270		
Leu	Ala	Ala	Ser	Asp	Arg	Ala	Arg	Arg	Gln	Ala	Gln	Gln	Asp	Arg	Asp
		275					280					285			
Glu	Met	Ala	Asp	Glu	Val	Ala	Asn	Gly	Asn	Leu	Ser	Lys	Ala	Ala	Ile
	290					295					300				
Leu	Glu	Glu	Lys	Arg	Gln	Leu	Glu	Gly	Arg	Leu	Gly	Gln	Leu	Glu	Glu
305					310				315						320
Glu	Leu	Glu	Glu	Glu	Gln	Thr	Xaa	Ser	Glu	Leu	Leu	Asn	Asp	Arg	Tyr
			325					330					335		
Arg	Lys	Leu	Leu	Gln	Val	Glu	Ser	Leu	Thr	Thr	Glu	Leu	Ser	Ala	
		340					345					350			
Glu	Arg	Ser	Phe	Ser	Ala	Lys	Ala	Glu	Ser	Gly	Arg	Gln	Gln	Leu	Glu

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Arg Gln Ile Gln Glu Leu Arg Gly Arg Leu Gly Glu Glu Asp Ala Gly
   370          375          380
Ala Arg Ala Arg His Lys Met Thr Ile Ala Ala Leu Glu Ser Lys Leu
385          390          395          400
Ala Gln Ala Glu Glu Gln Leu Glu Gln Glu Thr Arg Glu Arg Ile Leu
          405          410          415
Ser Gly Lys Leu Val Pro Lys Ser Lys Lys Arg Phe Lys Glu Val Val
          420          425          430
Leu Gln Val Glu Glu Glu Arg Arg Val Ala Asp Gln Leu Arg Asp Gln
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Leu Glu Lys Gly Asn Leu Arg Val Lys Gln Leu Lys Arg Gln Leu Glu
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<210> 1967
 <211> 401
 <212> DNA
 <213> Homo sapiens

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300
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401

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<210> 1968
 <211> 94
 <212> PRT
 <213> Homo sapiens

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<400> 1968
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  1          5          10          15
Gly Asp Ala Gly Leu Ala Pro Asp Pro Leu Trp Gly Val Gly Cys Gly
          20          25          30
Trp Ala Phe Gln Ser Ala Ala Trp Leu Val Asp Cys Thr Gly Ser His
          35          40          45
Leu Ala Asp Arg Thr Ala Leu Asp Arg Ala Leu Arg Ser Tyr His Arg
          50          55          60
Tyr His Arg His Ser Leu Gly Trp His Glu Arg Leu Ile Ser Arg Tyr
          65          70          75          80
Ala Asn Gly Arg Gly Phe His Ala Leu Glu Lys Leu Met Leu

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85

90

<210> 1969
 <211> 464
 <212> DNA
 <213> Homo sapiens

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 180
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 240
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 464

<210> 1970
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 1970
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 Leu Leu Gly His Val Ala Asn Thr Gln Val Met Ala Thr Gln Arg Asp
 35 40 45
 Leu Lys Pro Ser Val Phe Val Asn Leu Ser Ser Ser Glu Gly Leu Pro
 50 55 60
 Val Ser Met Met Glu Val Ala Ser Leu Gly Ile Pro Ile Ile Ala Thr
 65 70 75 80
 Gly Val Gly Gly Val Gly Glu Ile Val Ser Ser Asp Asn Gly His Leu
 85 90 95
 Leu Pro Ala Glu Phe Thr Asp Thr Gln Ala Ser Asp Ala Leu Val Gln
 100 105 110
 Leu Ala Arg Leu Ser Glu Asp Glu Tyr Gln Gln Val Cys Gln Ala Ser
 115 120 125
 Arg Gln Val Trp Glu Glu Lys Phe Arg Ala Ser Val Val Tyr Pro Glu
 130 135 140
 Phe Cys Arg Glu Cys Trp Gly Asp Ala Asp
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<210> 1971
 <211> 520

<212> DNA

<213> Homo sapiens

<400> 1971

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120
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180
atctaacatt tcaaattcaa gacatgattc tgatgaaatc agtggtaaaa tgaatacata
240
tatgaattct acgacttcta agaaggatac tgggtgtgcaa acagatgact taaatatagg
300
aatattcacc aatgcagaat cacattgtgg atcattaatg gagagggaca tcacaaattg
360
ttcatctcct gagatttcgg cagaacttat tggacagttt agcaccaaga aaaacaagca
420
agaactaact caggataaag gagccagctt agaaaaagaa aacaatcggg gtaatgacca
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<210> 1972

<211> 118

<212> PRT

<213> Homo sapiens

<400> 1972

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      20             25             30
Lys Asp Thr Gly Val Gln Thr Asp Asp Leu Asn Ile Gly Ile Phe Thr
      35             40             45
Asn Ala Glu Ser His Cys Gly Ser Leu Met Glu Arg Asp Ile Thr Asn
      50             55             60
Cys Ser Ser Pro Glu Ile Ser Ala Glu Leu Ile Gly Gln Phe Ser Thr
      65             70             75             80
Lys Lys Asn Lys Gln Glu Leu Thr Gln Asp Lys Gly Ala Ser Leu Glu
      85             90             95
Lys Glu Asn Asn Arg Cys Asn Asp Gln Cys Asn Gln Phe Thr Arg Ile
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Glu Lys Gln Thr Lys Gln
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<210> 1973

<211> 331

<212> DNA

<213> Homo sapiens

<400> 1973

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<210> 1974

<211> 103

<212> PRT

<213> Homo sapiens

<400> 1974

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Gln	Lys	Lys	Ser	Asp	Gly	Leu	Gly	Ser	Phe	Phe	Val	Ala	Thr	Thr	Leu
			20					25					30		
Glu	Glu	Leu	Gln	Ala	Met	Asn	Ser	Asp	Thr	Arg	Phe	Thr	Thr	Ser	Val
		35				40						45			
Gly	Ile	Asp	Leu	Ser	Pro	Ala	Arg	Ser	Phe	Ser	Ala	Trp	Ala	Leu	Arg
	50					55					60				
Gly	Thr	Thr	Phe	Ser	Ala	Pro	Ser	Met	Thr	Lys	Ala	Ser	Arg	Ser	Ser
65					70					75				80	
Ser	Ala	Ala	Pro	Ser	Ala	Pro	Arg	Arg	Cys	Gly	Lys	Ser	Trp	Arg	Ser
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Pro	Pro	Val	Lys	Ser	Cys	Ala									
				100											

<210> 1975

<211> 370

<212> DNA

<213> Homo sapiens

<400> 1975

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 370

<210> 1976

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 1976
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 35 40 45
 Val Gly Val Gly Leu Cys Leu Arg Arg Asp Val Ala Arg Ser Leu Arg
 50 55 60
 Gln Arg Ile Ala Asn Leu Leu Thr Ala Arg Arg Val Gly Thr Arg
 65 70 75 80
 Leu Leu Pro Arg Leu Ala Gln Leu Gly Ala His Cys Thr Gln Arg Ile
 85 90 95
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 100 105 110
 Gln Leu His Glu Arg Leu Ala Arg Arg
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<210> 1977
 <211> 551
 <212> DNA
 <213> Homo sapiens

<400> 1977
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 120
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 180
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 240
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 300
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 360
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 420
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<210> 1978
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 1978

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 20 25 30
 Pro Leu Pro Ala Val Ser Pro Thr Ser Phe Ile Pro Pro Val Thr Arg
 35 40 45
 Glu Val Gln Ile Phe Gln Pro Gly His Cys Leu Pro Ser Arg Leu Ala
 50 55 60
 Pro Pro Val His Leu Leu Cys Ser Ser Leu Cys Asn Ser Leu Ala Ala
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 Cys Leu Leu Ser Pro Leu Thr Gln Leu Leu Thr Cys Pro Thr Pro Ala
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 Gln Pro Thr Ser Ser
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<210> 1979

<211> 5530

<212> DNA

<213> Homo sapiens

<400> 1979

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<210> 1980

<211> 929

<212> PRT

<213> Homo sapiens

<400> 1980

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	20	25	30
Gln Pro Pro Thr Ala Ala Ala Ala Gln Pro Arg Arg Arg Gln Gly			
	35	40	45
Glu Glu Val Gln Glu Arg Ala Glu Pro Pro Gly His Pro His Pro Leu			
	50	55	60
Ala Gln Arg Arg Arg Ser Lys Gly Leu Val Gln Asn Ile Asp Gln Leu			
	65	70	75
Tyr Ser Gly Gly Gly Lys Val Gly Tyr Leu Val Tyr Ala Gly Gly Arg			
	85	90	95
Arg Phe Leu Leu Asp Leu Glu Arg Asp Gly Ser Val Gly Ile Ala Gly			
	100	105	110
Phe Val Pro Ala Gly Gly Gly Thr Ser Ala Pro Trp Arg His Arg Ser			
	115	120	125
His Cys Phe Tyr Arg Gly Thr Val Asp Ala Ser Pro Arg Ser Leu Ala			
	130	135	140
Val Phe Asp Leu Cys Gly Gly Leu Asp Gly Phe Phe Ala Val Lys His			
	145	150	155
Ala Arg Tyr Thr Leu Lys Pro Leu Leu Arg Gly Pro Trp Ala Glu Glu			
	165	170	175
Glu Lys Gly Arg Val Tyr Gly Asp Gly Ser Ala Arg Ile Leu His Val			
	180	185	190
Tyr Thr Arg Arg Ala Ser Ala Ser Arg Pro Cys Arg Arg Ala Pro Ala			
	195	200	205
Ala Lys Pro Pro Arg Pro His Arg Arg Pro Thr Ser Met Leu Arg Arg			
	210	215	220
Thr Ala Thr Arg Ala Asp Ala Gln His Ala Ser Gln Leu Leu Asp Gln			
	225	230	235
Ser Ala Leu Ser Pro Ala Gly Gly Ser Gly Pro Gln Thr Trp Trp Arg			
	245	250	255
Arg Arg Arg Arg Ser Ile Ser Arg Ala Arg Gln Val Glu Leu Leu Leu			
	260	265	270
Val Ala Asp Ala Ser Met Ala Arg Leu Tyr Gly Arg Gly Leu Gln His			
	275	280	285
Tyr Leu Leu Thr Leu Ala Ser Ile Ala Asn Arg Leu Tyr Ser His Ala			
	290	295	300
Ser Ile Glu Asn His Ile Arg Leu Ala Val Val Lys Val Val Val Leu			
	305	310	315
Gly Asp Lys Asp Lys Ser Leu Glu Val Ser Lys Asn Ala Ala Thr Thr			
	325	330	335
Leu Lys Asn Phe Cys Lys Trp Gln His Gln His Asn Gln Leu Gly Asp			
	340	345	350
Asp His Glu Glu His Tyr Asp Ala Ala Ile Leu Phe Thr Arg Glu Asp			
	355	360	365
Leu Cys Gly His His Ser Cys Asp Thr Leu Gly Met Ala Asp Val Gly			
	370	375	380
Thr Ile Cys Ser Pro Glu Arg Ser Cys Ala Val Ile Glu Asp Asp Gly			
	385	390	395
Leu His Ala Ala Phe Thr Val Ala His Glu Ile Gly His Leu Leu Gly			
	405	410	415
Leu Ser His Asp Asp Ser Lys Phe Cys Glu Glu Thr Phe Gly Ser Thr			
	420	425	430
Glu Asp Lys Arg Leu Met Ser Ser Ile Leu Thr Ser Ile Asp Ala Ser			

1497

865	870								875				880			
Gly	Pro	Trp	Leu	Ala	Cys	Ser	Arg	Thr	Cys	Asp	Thr	Gly	Trp	His	Thr	
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Cys																

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<210> 1981
<211> 327
<212> DNA
<213> Homo sapiens
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<210> 1982
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<212> PRT
<213> Homo sapiens
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          20              25              30
Gly Val Asn  Pro  Arg  Gly  Val  Asp  Asn  Arg  Thr  Ser  Met  Ala  Val  Phe
          35              40              45
Ser  Pro  Pro  Lys  Ala  Ala  Gly  Gly  Gly  Arg  Cys  Pro  Gly  Pro  Cys  Arg
    50              55              60
Ile Met Ala  Trp  Pro  Gly  Gln  Arg  Ala  Ser  Ser  Ser  Gly  Arg  Gly  Arg
65          70              75              80
Gly  Pro  Ala  Leu  Ser  Glu  Trp  Ala  Ser  Cys  Leu  Asn  Gly  Ser  Lys  Val
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<210> 1983
<211> 383
<212> DNA
<213> Homo sapiens
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<400> 1983

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<210> 1984

<211> 127

<212> PRT

<213> Homo sapiens

<400> 1984

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			20					25				30			
Ala	Gln	Pro	Glu	Glu	Arg	Asn	Val	Pro	Lys	Arg	Asp	Ala	Ser	Val	Phe
		35				40					45				
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	50				55						60				
Tyr	Thr	Val	Val	Asp	Leu	Leu	Asn	Arg	Phe	Tyr	Thr	Ile	Val	Val	Glu
65				70					75					80	
Glu	Val	Asn	Arg	Ala	Gly	Gly	Val	Val	Asn	Lys	Phe	Ala	Gly	Asp	Ala
			85						90					95	
Val	Leu	Ala	Ile	Phe	Asn	Val	Pro	His	Asp	His	Pro	Asp	Pro	Ala	Gly
			100					105						110	
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<210> 1985

<211> 381

<212> DNA

<213> Homo sapiens

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<210> 1986
 <211> 124
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Asp Arg Ile Lys Gly Tyr Lys Ala Cys Glu Pro Met Trp Gly Pro
 50 55 60
 Gly Gly Arg Pro Thr Thr Phe Ala Arg Pro Phe Ala Asp Thr Arg Val
 65 70 75 80
 Phe Glu Ser Asp Glu Thr Ala Gln Thr Ala Asp Glu Gln Thr Leu Ile
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 100 105 110
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<210> 1987
 <211> 419
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 300
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<210> 1988
 <211> 139
 <212> PRT

<213> Homo sapiens

<400> 1988

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 20           25           30
Ile Gly Phe Met Gly Val Arg Thr Met Ile Asn Arg Tyr Leu Leu Arg
 35           40           45
Thr Pro Asp Lys Gln Ala Leu Glu Val Pro Gln Tyr Phe Trp Met Arg
 50           55           60
Val Ala Met Gly Leu Ser Leu Thr Glu Asp Asp Pro Thr Ser Ser Ala
 65           70           75           80
Xaa Cys Leu Tyr Asp Ser Met Ser Asn Leu Arg His Leu Ala Ala Gly
 85           90           95
Ser Thr Leu Val Asn Ala Gly Thr His Xaa Ala Gln Leu Ser Asn Cys
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<210> 1989

<211> 10795

<212> DNA

<213> Homo sapiens

<400> 1989

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780

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<211> 2971

<212> PRT

<213> Homo sapiens

<400> 1990

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Leu	Leu	Ser	Gln	Ser	Leu	Asn	Gln	Pro	Leu	Thr	Ser	Ser	Lys	Ala	Gly
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Cys Glu Lys Gly Asn	Trp Gly Pro His Leu Ile	Ile Val Pro Thr Ser
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Trp Phe Ser Asn Pro	Leu Thr Gly Met Ile Glu	Gly Ser Gln Glu Tyr
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Leu Arg Arg Val Lys	Val Asp Val Glu Lys Gln	Met Pro Lys Lys Tyr
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Glu His Val Ile Arg	Cys Arg Leu Ser Lys Arg	Gln Arg Cys Leu Tyr
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Asp Asp Phe Met Ala	Gln Thr Thr Lys Glu Thr	Leu Ala Thr Gly
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2660					2665					2670						
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2675					2680					2685						
Leu	Pro	Ile	Pro	Gly	Thr	Ile	Ser	Ser	Ala	Gly	Asp	Gly	Asn	Ser	Glu	
2690					2695					2700						
Ser	Arg	Thr	Gln	Pro	Pro	Pro	His	Pro	Ser	Pro	Leu	Thr	Pro	Leu	Pro	
2705					2710					2715					2720	
Pro	Leu	Leu	Val	Cys	Pro	Thr	Ala	Thr	Val	Ala	Asn	Thr	Val	Thr	Thr	
2725					2730					2735						
Val	Thr	Ile	Ser	Thr	Ser	Pro	Pro	Lys	Arg	Lys	Arg	Gly	Arg	Pro	Pro	
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Lys	Asn	Pro	Pro	Ser	Pro	Arg	Pro	Ser	Gln	Leu	Pro	Val	Leu	Asp	Arg	
2755					2760					2765						
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2770					2775					2780						
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2820					2825					2830						
Asp	Asp	Leu	Asp	Leu	Ala	Asp	Ser	Gly	Pro	Gly	Gly	Leu	Glu	Leu	Thr	
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Pro	Pro	Val	Val	Ser	Leu	Thr	Pro	Lys	Leu	Arg	Ser	Thr	Arg	Leu	Arg	
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<210> 1991

<211> 3102

<212> DNA

<213> Homo sapiens

<400> 1991

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1080

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<210> 1992

<211> 733

<212> PRT

<213> Homo sapiens

<400> 1992

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Gly	Pro	Arg	Leu	Leu	Pro	Pro	Glu	Cys	Arg	Ser	Val	Ala	Cys	Val	Gln
			20					25					30		
Ala	Leu	Lys	Gly	Ser	Lys	Lys	Leu	Val	Leu	Ser	Val	Tyr	Ser	Ala	Gly
		35					40					45			
Arg	Ile	Pro	Gly	Gly	Tyr	Val	Thr	Asn	His	Ile	Tyr	Thr	Trp	Val	Asp
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Pro	Gln	Gly	Arg	Ser	Ile	Ser	Pro	Pro	Ser	Gly	Leu	Pro	Gln	Pro	His
65					70					75				80	
Gly	Gly	Ala	Leu	Arg	Gln	Gln	Glu	Gly	Asp	Arg	Arg	Ser	Thr	Leu	His
			85						90					95	
Leu	Leu	Gln	Gly	Gly	Asp	Glu	Lys	Lys	Val	Asn	Leu	Val	Leu	Gly	Asp
		100						105					110		
Gly	Arg	Ser	Leu	Gly	Leu	Thr	Ile	Arg	Gly	Gly	Ala	Glu	Tyr	Gly	Leu
		115					120					125			
Gly	Ile	Tyr	Ile	Thr	Gly	Val	Asp	Pro	Gly	Ser	Glu	Ala	Glu	Gly	Ser
	130					135					140				
Gly	Leu	Lys	Val	Gly	Asp	Gln	Ile	Leu	Glu	Val	Asn	Gly	Arg	Ser	Phe
145					150					155					160
Leu	Asn	Ile	Leu	His	Asp	Glu	Ala	Val	Arg	Leu	Leu	Lys	Ser	Ser	Arg
			165					170					175		
His	Leu	Ile	Leu	Thr	Val	Lys	Asp	Val	Gly	Arg	Leu	Pro	His	Ala	Arg
		180						185					190		
Thr	Thr	Val	Asp	Glu	Thr	Lys	Trp	Ile	Ala	Ser	Ser	Arg	Ile	Arg	Glu
	195					200						205			
Thr	Met	Ala	Asn	Ser	Ala	Gly	Phe	Leu	Gly	Asp	Leu	Thr	Thr	Glu	Gly
210					215						220				
Ile	Asn	Lys	Pro	Gly	Phe	Tyr	Lys	Gly	Pro	Ala	Gly	Ser	Gln	Val	Thr
225				230						235				240	
Leu	Ser	Ser	Leu	Gly	Asn	Gln	Thr	Arg	Val	Leu	Leu	Glu	Glu	Gln	Ala
			245					250						255	
Arg	His	Leu	Leu	Asn	Glu	Gln	Glu	His	Thr	Thr	Met	Ala	Tyr	Tyr	Leu

1518

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 705 710 715 720
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 725 730

<210> 1993

<211> 957

<212> DNA

<213> Homo sapiens

<400> 1993

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 120
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 180
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 240
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 300
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 360
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 420
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 660
 gatgggaggt ggtgatcatg actataacgc ccctatcga accgggaacc gccgatcaaa
 720
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 780
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<210> 1994

<211> 224

<212> PRT

<213> Homo sapiens

<400> 1994

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 Ile Pro Ala Gly Gln Ser Val Ala Val Met Gly Pro Ser Gly Ser Gly

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              35              40              45
Gly Ser Ile Glu Leu Ala Leu Pro Asp Arg Thr Val Asn Val Glu Asn
              50              55              60
Leu Ser Asn Glu Gly Arg Ala Lys Leu Arg Arg Gln Ser Leu Gly Phe
65              70              75              80
Val Phe Gln Gln Gly Met Leu Val Pro Glu Leu Thr Ala Val Glu Asn
              85              90              95
Thr Ala Leu Pro Leu Met Leu Asn Gly Val Ser Gln Thr Asp Ala Val
              100             105             110
Arg Tyr Ala Thr Gln Trp Leu Glu Ser Met Gly Leu Gly Gly Met Glu
              115             120             125
Asp Arg Arg Ile Gly Gln Leu Ser Gly Gly Gln Ala Gln Arg Val Thr
              130             135             140
Ile Ala Arg Ser Gln Val Ile Asp Pro Ser Ile Val Phe Ala Asp Glu
145              150              155              160
Pro Thr Gly Ala Leu Asp Ser Ala Thr Ala Val Glu Val Met Ala Ile
              165              170              175
Leu Leu Ser Ala Thr Thr Gly Arg Gly Arg Thr Leu Val Val Val Thr
              180              185              190
His Asp Glu Asp Val Ala Arg Arg Cys Gln Arg Ile Leu His Leu His
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<210> 1995

<211> 285

<212> DNA

<213> Homo sapiens

<400> 1995

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120
actgtcctca tcatgtgtga cttggactgt ggaccagccc ctggggtctt gctctgctga
180
cctatattct ttgtctcttg ttccctgagaa gctgggagtt gagaccaggt aagggtgtgt
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285

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<210> 1996

<211> 59

<212> PRT

<213> Homo sapiens

<400> 1996

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His His His His Tyr Gln His His His His His Tyr His Leu Tyr
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<400> 1999
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120

ggaagaatgg atcttactct cgctgaccct gagattgtcg ttaacaatgg cgatgatcat
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 240
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 300
 gggaccaatg tcaagctgaa tagccaagcc gtcgatgcat tcgctggctt ctatcaagct
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<210> 2000

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2000

Met	Asp	Leu	Thr	Leu	Ala	Asp	Pro	Glu	Ile	Val	Val	Asn	Asn	Gly	Asp
1				5				10						15	
Asp	His	Val	Ile	Met	Ser	Val	Lys	Ser	Lys	Thr	Met	Val	Gly	Gln	Leu
		20					25						30		
Val	Asp	Tyr	Gly	Arg	Ile	Thr	Phe	Val	Asp	Met	Thr	Gly	Ser	Ile	Thr
		35				40						45			
Gln	Gly	Gln	Asn	Asp	Ala	Ala	Gln	Val	Val	Gly	Thr	Asn	Val	Lys	Leu
	50					55				60					
Asn	Ser	Gln	Ala	Val	Asp	Ala	Phe	Ala	Gly	Phe	Tyr	Gln	Ala	Gly	Lys
65				70				75						80	
Pro	Met	Asp	Asp	Ile	Asp	Ser	Ser	Leu	Lys	Leu					
			85					90							

<210> 2001

<211> 1434

<212> DNA

<213> Homo sapiens

<400> 2001

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 120
 ttggtgactg ctggggcagg tgtcaacgag gccgactgta aaggctgctc tcccctccac
 180
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 240
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 300
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 480
 tacaacggtc actgtgaagc cttgaagacg ctggcggaga cgctggtgaa tctggacgta
 540

agggaccaca agggccggac cgcactcttc ctggccacgg agcgcggctc tactgagtgt
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<210> 2002

<211> 79

<212> PRT

<213> Homo sapiens

<400> 2002

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Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala	Ala	Asn
			20					25					30		
Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala	Gly	Val
			35				40					45			
Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala	Ala	Ala
			50				55				60				
Ser	Asp	Thr	Tyr	Arg	Xaa	Ser	Gly	Thr	Pro	Tyr	Thr	Phe	Gln	Pro	
65					70					75					

<210> 2003

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2003

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 120
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 180
 ggaagaaaac agataatatc acttcaaaaa cagctaatta atttcaaaaa ggaatggcaa
 240
 tttgaagtcc agagtcagaa tgagtatatt gctaacctca aggaccaact gcaagagatg
 300
 aaggcaaaat ccaacttgga gaatcgctac atgaaaacca ataccgagct gcagattgcc
 360
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 480
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 540
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 688

<210> 2004

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2004

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Phe	Ser	Asp	Val	Ile	Ala	Asp	Thr	Ile	Lys	Glu	Leu	Gln	Asp	Ser	Ala
			20					25					30		
Thr	Tyr	Asn	Ser	Leu	Leu	Gln	Ala	Leu	Ser	Lys	Glu	Arg	Glu	Asn	Lys
		35					40					45			
Met	His	Phe	Tyr	Asp	Ile	Ile	Ser	Arg	Glu	Glu	Lys	Gly	Arg	Lys	Gln
	50					55					60				
Ile	Ile	Ser	Leu	Gln	Lys	Gln	Leu	Ile	Asn	Phe	Lys	Lys	Glu	Trp	Gln
65					70					75				80	
Phe	Glu	Val	Gln	Ser	Gln	Asn	Glu	Tyr	Ile	Ala	Asn	Leu	Lys	Asp	Gln
			85						90					95	
Leu	Gln	Glu	Met	Lys	Ala	Lys	Ser	Asn	Leu	Glu	Asn	Arg	Tyr	Met	Lys
			100					105					110		
Thr	Asn	Thr	Glu	Leu	Gln	Ile	Ala	Gln	Thr	Gln	Lys	Lys	Cys	Asn	Arg
		115					120					125			
Thr	Glu	Glu	Leu	Leu	Val	Glu	Glu	Ile	Glu	Lys	Leu	Arg	Met	Lys	Thr
	130					135					140				
Glu	Glu	Glu	Ala	Arg	Thr	His	Thr	Glu	Ile	Glu	Met	Phe	Leu	Arg	Lys
145					150					155				160	
Glu	Gln	Gln	Val	Gly	Pro	His	Ser	Phe	Ser	Met	Leu				
			165						170						

<210> 2005
 <211> 354
 <212> DNA
 <213> Homo sapiens

<400> 2005
 gctagcacca agccaagggt atgtttcctt gcttgcatgt ggggtttctg gccagtcago
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 caagtgaact gattgacccc cagccctgtg gggaatttca ggggggtatt gtcttggtca
 120
 tcggagtcag ggggtggcctt tnagccaagg ctgcattaac ttttgggaaa agaaatggga
 180
 agcccgccgt gtcacagggg ctccctgaccg gctgggtagg gtttggcctt atcttacagc
 240
 cagtgtgtgtg tttgtcaga tggacgcaca tggaaaccag gctaggatca tcttcccaat
 300
 gtctactccc tgctttgggc tgtcctgaaa acaattgcaa agacattgtg gctg
 354

<210> 2006
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2006
 Met Phe Pro Cys Leu His Val Gly Phe Leu Ala Ser Gln Pro Ser Glu
 1 5 10 15
 Leu Ile Asp Pro Gln Pro Cys Gly Glu Phe Gln Gly Gly Ile Val Leu
 20 25 30
 Val Ile Gly Val Arg Gly Gly Leu Xaa Ala Lys Ala Ala Leu Thr Phe
 35 40 45
 Gly Lys Arg Asn Gly Lys Pro Ala Val Ser Gln Gly Leu Leu Thr Gly
 50 55 60
 Trp Val Gly Phe Gly Leu Ile Leu Gln Pro Val Leu Cys Leu Leu Arg
 65 70 75 80
 Trp Thr His Met Glu Thr Arg Leu Gly Ser Ser Ser Gln Cys Leu Leu
 85 90 95
 Pro Ala Leu Val Cys Pro Glu Asn Asn Cys Lys Asp Ile Val Ala
 100 105 110

<210> 2007
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 2007
 nnacgcgtgc catgtgcatg tgtatatgca tgtatgtgcg tatgtgtgtg catgtgtgtg
 60
 tgtatatgca tgtgtgtatg tgcattgtacg tgttngtgca tatgcgtgtg catgcattgcg
 120
 tgtgcgtatg tgtgcatann catgtgcaca catgtacaca cgtgtacatg ttcattgcattg
 180
 tgcacgtgca tatgtgtaca cgtgtattgcg tgtacattga tgagcatatg tacacgtgtg
 240

gatgtgtgtg tatgcatgtg tgtgtgcaca gatatgcctt ttcctttcat acaggctggg
 300
 ttgagtattg ctggtaggca gggacaactt tccgt
 335

<210> 2008
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2008
 Xaa Arg Val Pro Cys Ala Cys Val Tyr Ala Cys Met Cys Val Cys Val
 1 5 10 15
 Cys Met Cys Val Cys Ile Cys Met Cys Val Cys Ala Cys Thr Cys Xaa
 20 25 30
 Cys Ile Cys Val Cys Met His Ala Cys Ala Tyr Val Cys Ile Xaa Met
 35 40 45
 Cys Thr His Val His Thr Cys Thr Cys Ser Cys Met Cys Thr Cys Ile
 50 55 60
 Cys Val His Val Tyr Ala Cys Thr Cys Met Ser Ile Cys Thr Arg Val
 65 70 75 80
 Asp Val Cys Val Cys Met Cys Val Cys Thr Asp Met Pro Phe Pro Phe
 85 90 95
 Ile Gln Ala Gly Leu Ser Ile Ala Gly Arg Gln Gly Gln Leu Ser
 100 105 110

<210> 2009
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 2009
 gacatcaccc cgctgctggc caaccccaac ggtttctccg cagcgatcga ggaactggtg
 60
 ctgcgttccc cacgcgacat cgacgtggtc gtcggcatgg aggctcgagg cttcctcttc
 120
 gcagctccgg tcgccctggc catcggggca ggattcgtgc cggtgcgcaa gccgggggaa
 180
 ctccccggcc aggtgtattc cgagaccttt gccatggagt acggggagga gaccctcacc
 240
 gtccaccagt acgccatcaa gccgggggtcg cgcgatcatca tcgtcgac
 288

<210> 2010
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2010
 Asp Ile Thr Pro Leu Leu Ala Asn Pro Asn Gly Phe Ser Ala Ala Ile
 1 5 10 15
 Glu Glu Leu Val Leu Arg Ser Pro Arg Asp Ile Asp Val Val Val Gly
 20 25 30
 Met Glu Ala Arg Gly Phe Leu Phe Ala Ala Pro Val Ala Leu Ala Ile

Gly	Ala	Gly	Phe	Val	Pro	Val	Arg	Lys	Pro	Gly	Lys	Leu	Pro	Gly	Gln
	50					55					60				
Val	Tyr	Ser	Glu	Thr	Phe	Ala	Met	Glu	Tyr	Gly	Glu	Glu	Thr	Leu	Thr
65					70					75					80
Val	His	Gln	Tyr	Ala	Ile	Lys	Pro	Gly	Ser	Arg	Val	Ile	Ile	Val	Asp
				85					90					95	

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<210> 2011
<211> 384
<212> DNA
<213> Homo sapiens
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<400> 2011
ctcgagcagt ctctgcatgt taacaccccc gtacgggcccg taaagcataa cgtctctccga
60
cttggccgcgc cctgcgctgct tcgctaggcg gccggtgaac ccacctgagg gccggatgta
120
gaagtcaacg gtggacgacg ggttggaggg tttgttgatt ggcgagtggg gaagcgagca
180
gattgtaaat tggtagaacg gggaacagag attagtcaca atgacgagaa cgacaacaga
240
atgttgattg ttatagccat ctctggagga gagggaaaaa gccaggtatc tagacagcga
300
aagcaaattgt gagccgaggg gacagtgccg tccttcgttc ctcggaact cccacgaggg
360
accttccatt ctgtgggcag aatt
384
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<210> 2012
<211> 123
<212> PRT
<213> Homo sapiens
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<400> 2012
Met Glu Gly Ala Ser Trp Glu Leu Pro Arg Asn Glu Gly Arg His Cys
  1              5              10              15
Pro Leu Gly Ser His Leu Leu Ser Leu Ser Arg Tyr Leu Ala Phe Ser
      20              25              30
Leu Ser Ser Arg Asp Gly Tyr Asn Asn Gln His Ser Val Val Val Leu
      35              40              45
Val Ile Val Thr Asn Leu Cys Ser Pro Phe Tyr Gln Phe Thr Ile Cys
      50              55              60
Ser Leu Pro His Ser Pro Ile Asn Lys Pro Ser Asn Pro Ser Ser Thr
65      70              75              80
Val Asp Phe Tyr Ile Arg Pro Ser Gly Gly Phe Thr Gly Arg Leu Ala
      85              90              95
Lys His Ala Gly Gly Gly Lys Ser Glu Thr Val Met Leu Tyr Gly Pro
      100             105             110
Tyr Gly Gly Val Asn Met Gln Arg Leu Leu Glu
      115             120

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<210> 2013
<211> 309

<212> DNA

<213> Homo sapiens

<400> 2013

gcgtatcccc acggctacgg catgaccgcg cttatcggcc cggacctgtc caccgtcgaa
 60
 gccttgctcg cccagggtcca cagcacacaa accccgggtgt acctggccaa tatcaatgcc
 120
 gataaccaga cggttatcgc gggcagcgac ggggcaatga aagcagtcgc caatctggtc
 180
 cgcggcaacg gcgtcgccaa acgcttggcc gtcagcgtgc cgtcccattg tgcgctgctg
 240
 gaaaaacctg ccgaaacact ggcccaagcc ttcgctgaag tgacgctgaa aacgccgnch
 300
 nnncccnch
 309

<210> 2014

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2014

Ala	Tyr	Pro	His	Gly	Tyr	Gly	Met	Thr	Ala	Leu	Ile	Gly	Pro	Asp	Leu
1				5					10					15	
Ser	Thr	Val	Glu	Ala	Leu	Leu	Ala	Gln	Val	His	Ser	Thr	Gln	Thr	Pro
			20					25					30		
Val	Tyr	Leu	Ala	Asn	Ile	Asn	Ala	Asp	Asn	Gln	Thr	Val	Ile	Ala	Gly
		35					40					45			
Ser	Asp	Gly	Ala	Met	Lys	Ala	Val	Ala	Asn	Leu	Val	Arg	Gly	Asn	Gly
	50					55					60				
Val	Ala	Lys	Arg	Leu	Ala	Val	Ser	Val	Pro	Ser	His	Cys	Ala	Leu	Leu
65				70					75					80	
Glu	Lys	Pro	Ala	Glu	Thr	Leu	Ala	Gln	Ala	Phe	Ala	Glu	Val	Thr	Leu
			85					90						95	
Lys	Thr	Pro	Xaa	Xaa	Pro	Xaa									
			100												

<210> 2015

<211> 329

<212> DNA

<213> Homo sapiens

<400> 2015

acgcgtgcca tgctcgggtat ccgcccgcac caccctgtct ttgggaccgg cgagttcacc
 60
 gatctaggcg ggccggacat ggcagtgatg tccttctctac gtcacaacga gcacgaaacg
 120
 gtctctgtgcc tggctaattct ctccgatact gagcggacgg ttgcccttca ccttccacaa
 180
 ttcgcggggcg tggcgggctc ttctctctac catggtcagg acgcgcaacc agtaaaagct
 240
 gacggaacac tgtccgtacc gttgtggcca tatggctatc gatggctgca gatgtccggg
 300

gaggagaggt catgaccgct tgggaagac
329

<210> 2016
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2016
Thr Arg Ala Met Leu Gly Ile Arg Arg His His Pro Val Phe Gly Thr
1 5 10 15
Gly Glu Phe Thr Asp Leu Gly Gly Pro Asp Met Ala Val Met Ser Phe
20 25 30
Leu Arg His Asn Glu His Glu Thr Val Leu Cys Leu Ala Asn Leu Ser
35 40 45
Asp Thr Glu Arg Thr Val Ala Leu His Leu Pro Gln Phe Ala Gly Val
50 55 60
Ala Gly Ser Ser Leu Ile His Gly Gln Asp Ala Gln Pro Val Lys Ala
65 70 75 80
Asp Gly Thr Leu Ser Val Pro Leu Trp Pro Tyr Gly Tyr Arg Trp Leu
85 90 95
Gln Met Ser Gly Glu Glu Arg Ser
100

<210> 2017
<211> 457
<212> DNA
<213> Homo sapiens

<400> 2017
accaagggtca gattcatggc ctcttttctc ccagcggcca gcaggaaacg cggggagccc
60
ttgatcatct ccgacatcaa gaaaggcagc gtggcacaca ggacgggcac cctggagcca
120
ggcgacaagc tactggccat tgacaatatc cgcctggaca actgccccat ggaggacgcc
180
gtgcaaatcc tgcggcagtg cgaggacctg gtgaagctga agatccggaa ggacgaggac
240
aactctgatg agctggagac cacagggtgcc gtcagttaca cagtggagct gaagcgctac
300
gggggtcccc tgggcatcac catttcgggc acggaggaac cttttgacct cattttcatc
360
tcaggcctcc ccaaactggg cctggctgag aggactggtg ccatccagtg ggggaaccgc
420
ttcggaccat aacaacgtta ttctcaggga cggacca
457

<210> 2018
<211> 143
<212> PRT
<213> Homo sapiens

<400> 2018
Thr Lys Val Arg Phe Met Ala Ser Phe Pro Pro Ala Ala Ser Arg Lys

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      1           5           10           15
Arg Gly Glu Pro Leu Ile Ile Ser Asp Ile Lys Lys Gly Ser Val Ala
      20           25           30
His Arg Thr Gly Thr Leu Glu Pro Gly Asp Lys Leu Leu Ala Ile Asp
      35           40           45
Asn Ile Arg Leu Asp Asn Cys Pro Met Glu Asp Ala Val Gln Ile Leu
      50           55           60
Arg Gln Cys Glu Asp Leu Val Lys Leu Lys Ile Arg Lys Asp Glu Asp
      65           70           75           80
Asn Ser Asp Glu Leu Glu Thr Thr Gly Ala Val Ser Tyr Thr Val Glu
      85           90           95
Leu Lys Arg Tyr Gly Gly Pro Leu Gly Ile Thr Ile Ser Gly Thr Glu
      100          105          110
Glu Pro Phe Asp Pro Ile Phe Ile Ser Gly Leu Pro Lys Arg Gly Leu
      115          120          125
Ala Glu Arg Thr Gly Ala Ile Gln Trp Gly Asn Arg Phe Gly Pro
      130          135          140

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<210> 2019

<211> 483

<212> DNA

<213> Homo sapiens

<400> 2019

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cgcgctcggcg acgattttat cctcgggggtt cggtataaccg ccgatgaatg tctcgagaac
60
ggcaccggcga aggcggaagg catcgaaatc tccagacggc tgaaggagag cggcctgac
120
gactatctca acgtcatcag gggacatata gacaccgatc cgggcctgac cgacgtcatc
180
cccattcagg gcatggcgag cgcgccgcat cttgatttcg caggcgaaat ccgcgcggcg
240
accagcttcc ccgtcttcca tgccgccaaa attcaggatg tcgccaccgc ccggcatgcg
300
attgccgcg gcaaggtcga catgatcggc atgaccgcg cccacatgac cgatccgcat
360
atcgtccgca agatcatgga aaaacaggag gaggacatcc gcccttgcgt cggcgccaat
420
tattgtcttg atcgatttta tcaaggcggc ctgccttct gcattcacia tgcggcaacc
480
ggc
483

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<210> 2020

<211> 161

<212> PRT

<213> Homo sapiens

<400> 2020

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Arg Val Gly Asp Asp Phe Ile Leu Gly Val Arg Tyr Thr Ala Asp Glu
      1           5           10           15
Cys Leu Glu Asn Gly Thr Gly Lys Ala Glu Gly Ile Glu Ile Ser Arg
      20           25           30
Arg Leu Lys Glu Ser Gly Leu Ile Asp Tyr Leu Asn Val Ile Arg Gly

```


35					40					45					
His	Ile	Asp	Thr	Asp	Pro	Gly	Leu	Thr	Asp	Val	Ile	Pro	Ile	Gln	Gly
50					55					60					
Met	Ala	Ser	Ala	Pro	His	Leu	Asp	Phe	Ala	Gly	Glu	Ile	Arg	Ala	Ala
65	70					75					80				
Thr	Ser	Phe	Pro	Val	Phe	His	Ala	Ala	Lys	Ile	Gln	Asp	Val	Ala	Thr
85					90					95					
Ala	Arg	His	Ala	Ile	Ala	Ala	Gly	Lys	Val	Asp	Met	Ile	Gly	Met	Thr
100					105					110					
Arg	Ala	His	Met	Thr	Asp	Pro	His	Ile	Val	Arg	Lys	Ile	Met	Glu	Lys
115					120					125					
Gln	Glu	Glu	Asp	Ile	Arg	Pro	Cys	Val	Gly	Ala	Asn	Tyr	Cys	Leu	Asp
130					135					140					
Arg	Ile	Tyr	Gln	Gly	Gly	Leu	Ala	Phe	Cys	Ile	His	Asn	Ala	Ala	Thr
145	150					155					160				
Gly															

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<210> 2021
<211> 797
<212> DNA
<213> Homo sapiens
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<400> 2021
ngaattcggg cactggctta actcggagca cagcttcacc acgacccatg acaaggaagg
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gtttctcctg agaagggcc acaagtgtgt ttaaggacat cctccctcct gtccctgcag
120
ccctcctccc tcagtactcg cgagactacg aaaacacgtg ctgaaatgga caccgcctcc
180
gggagccagt gttccgtcac ccagagaagc atactcaata atgaaaagct ggtcttgccg
240
ccccgcacat ccagagtga aaggctggtc ttacccctgc actacttcca ggtggtgacc
300
tgggctgtct tcgtgggctt ttctcggccc accttcggga tcttcattcc ctctctgctt
360
cacgcgtgga aatacatcgc ctatgtggta tccttttcat cgtggcatgg tctaagcggg
420
aggggttctt ggaggacctt gcgatggacc tggtctgtgg gtctgggcca tggctgcccc
480
gtggcaccag tcacctgtcc tgggccagac tatgtcccc gagcctgcag gtgggccag
540
tgggccctta tggttttggc cagccccggt taagggtcag gccaggccag cgttggtgta
600
gggagttccg gagagggaa ctgtcaggag ggacagcagc ccctggcgtt ggccgaggac
660
ccgccctgct ggcagccttc cgctaaaatc cctgcgcagc attttgaca tggccagccc
720
ctttctctt gcccttggtg ccaaggagga acagcgccat gcccgcagg tcggcagcct
780
gcgtttccat gccaaagc
797

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<210> 2022

<211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2022

```

Met Asp Thr Arg Ser Gly Ser Gln Cys Ser Val Thr Pro Glu Ala Ile
 1           5           10           15
Leu Asn Asn Glu Lys Leu Val Leu Pro Pro Arg Ile Ser Arg Val Asn
      20           25           30
Gly Trp Ser Leu Pro Leu His Tyr Phe Gln Val Val Thr Trp Ala Val
      35           40           45
Phe Val Gly Leu Ser Ser Ala Thr Phe Gly Ile Phe Ile Pro Phe Leu
      50           55           60
Pro His Ala Trp Lys Tyr Ile Ala Tyr Val Val Ser Phe Ser Ser Trp
65           70           75           80
His Gly Leu Ser Gly Arg Gly Ser Trp Arg Thr Leu Arg Trp Thr Trp
      85           90           95
Leu Trp Gly Leu Gly His Gly Cys Pro Val Ala Pro Val Thr Cys Pro
      100          105          110
Gly Pro Asp Tyr Val Pro Arg Ala Cys Arg Trp Ala Gln Trp Pro Leu
      115          120          125
Met Val Leu Ala Ser Pro Gly
      130          135

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<210> 2023
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2023

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naatctccga cgatccctgc cgacgtgctc gccggtgctc tcaagcaggc taaggaggct
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cgcacccgga tccttgaggt gatgaacgag gccatcgatt ctcccgatga aatggccccg
120
actgctccgc gcatcattac cgteccacatc ccagtggaca agatcgggtga ggtcatcggc
180
cccaagggca agatgattaa ccagattcag gacgacactg gcgccaatat ctctattgag
240
gacgatggca cgattttcat cggggctgat aacggagatt cggccgagtc tgcccgttcg
300
atgatcaacg cgatcgctaa cccacagatg cccgaggtcg gtgagcgtaa cctcggcacc
360
gtcgtcaaga cgacgagctt tggcgctttc gtctctctgc tgcccggcaa ggatgggtctg
420
ttgcacatct ccaagatgcg tgaccttaac gacggtaaac gc
462

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<210> 2024
 <211> 154
 <212> PRT
 <213> Homo sapiens

<400> 2024

```

Xaa Ser Pro Thr Ile Pro Ala Asp Val Leu Ala Gly Ala Leu Lys Gln

```

```

      1           5           10           15
Ala Lys Glu Ala Arg Thr Ala Ile Leu Glu Val Met Asn Glu Ala Ile
      20           25           30
Asp Ser Pro Asp Glu Met Ala Pro Thr Ala Pro Arg Ile Ile Thr Val
      35           40           45
His Ile Pro Val Asp Lys Ile Gly Glu Val Ile Gly Pro Lys Gly Lys
      50           55           60
Met Ile Asn Gln Ile Gln Asp Asp Thr Gly Ala Asn Ile Ser Ile Glu
      65           70           75           80
Asp Asp Gly Thr Ile Phe Ile Gly Ala Asp Asn Gly Asp Ser Ala Glu
      85           90           95
Ser Ala Arg Ser Met Ile Asn Ala Ile Ala Asn Pro Gln Met Pro Glu
      100          105          110
Val Gly Glu Arg Tyr Leu Gly Thr Val Val Lys Thr Thr Ser Phe Gly
      115          120          125
Ala Phe Val Ser Leu Leu Pro Gly Lys Asp Gly Leu Leu His Ile Ser
      130          135          140
Lys Met Arg Asp Leu Asn Asp Gly Lys Arg
145          150

```

<210> 2025

<211> 872

<212> DNA

<213> Homo sapiens

<400> 2025

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cgtggtaacg atttacagga aagaacagct ggaactcgtg ctgggataac cagggtacaag
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tgctctctgc agagaataag tgcacacagg ttggtgtctt ctgaccgaga gccctcctga
120
agggaggtct gtacctcctc cctcatctca ttttacacaa ggcgacaggt cagaggccag
180
ggtgggacga gagcgagga gcaactgtctc tggcagcagc acttgccact ccacaatgtg
240
gagaccagaa cggcacccca gagagcacgg gggaaatggc tcctctttaa aacaatggca
300
gaagaaatcc agccaaggtc acttttcctg tgtgagcatg ttaaggcca gagagtggct
360
acttctctgc ctctgcagc tccctcagtg tggcttgag gagttggcga agcttcocaga
420
acacgctgga ggctgctctc cgggtgttcc cactggggac ccaggggtct gcacattcct
480
gcaccgcctc ctgtaactgc agctgaagct ggaaagagac cgcagagctc ttgagagggc
540
cggaaaacca atggcgaaat attttgtcac agatgacctg caggttggtg tttacgcgct
600
gcgctccgca tttgttgact cgtaaatac atcttgaaaa acagtcaaag aaattgcagt
660
cttcatctcc tgtgcagttt tgetcaagga tttccctcat tttaggttca aaaaaggcca
720
tgtccacatc aatagccacc actgtgaagt cgctccggat ggcaaagttt tccggcttga
780
tgtcgagag gtggaggcgg tgggtacagt ccctgtcgaa atgggtcccc atgtccaaga
840

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agctgagtgc gaggccctg atggccctgg cc
872

<210> 2026

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2026

Met	Gly	Asn	His	Phe	Asp	Arg	Asp	Cys	Thr	His	Arg	Leu	His	Leu	Cys
1				5					10					15	
Asp	Ile	Lys	Pro	Glu	Asn	Phe	Ala	Ile	Arg	Ser	Asp	Phe	Thr	Val	Val
			20					25				30			
Ala	Ile	Asp	Val	Asp	Met	Ala	Phe	Phe	Glu	Pro	Lys	Met	Arg	Glu	Ile
		35					40					45			
Leu	Glu	Gln	Asn	Cys	Thr	Gly	Asp	Glu	Asp	Cys	Asn	Phe	Phe	Asp	Cys
	50					55					60				
Phe	Ser	Arg	Cys	Asp	Leu	Arg	Val	Asn	Lys	Cys	Gly	Ala	Gln	Arg	Val
65					70					75				80	
Asn	Asn	Asn	Leu	Gln	Val	Ile	Cys	Asp	Lys	Ile	Phe	Arg	His	Trp	Phe
			85						90					95	
Ser	Ala	Pro	Leu	Lys	Ser	Ser	Ala	Val	Ser	Phe	Gln	Leu	Gln	Leu	Gln
			100					105					110		
Leu	Gln	Glu	Ala	Val	Gln	Glu	Cys	Ala	Asp	Pro	Gly	Val	Pro	Ser	Gly
		115					120					125			
Asn	Thr	Arg	Arg	Ala	Ala	Ser	Ser	Val	Phe	Trp	Lys	Leu	Arg	Gln	Leu
	130					135					140				
Leu	Gln	Ala	Thr	Leu	Arg	Glu	Leu	Gln	Glu	Ala	Glu	Lys			
145					150					155					

<210> 2027

<211> 721

<212> DNA

<213> Homo sapiens

<400> 2027

tgtacaatga cagaccaagt ataaggcttt ggttgagaga ccagctttta aatattgaaa
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gacaaatata gtgtaaaagg cgcaatggaa tttgtatagt gaaggagatt ctctagtccc
120
agggttgtaa tgtcacttct gtctaattca ttacagaatt acagaatcaa atcatgttag
180
cctagaaga aactgcagat cattttgttc aatctttotca ttatatagga aaggaaattt
240
gagggccagt gcaatggttt gccaaagtca cacaactagt tagtggaagg atccaggcatt
300
tctaattcct ttcttttact aatacatttg gactgctcta cagaattact tctgtctgat
360
actatccact ttgaagagta gctagcatat agtagccatt tacttttggc tcaattaaaa
420
gcaaacattt ttgggacaaa atcaggcttt cctgattact tcttagataa cagagcccac
480
acagtattaa aacatgcagc ctttctttat gcaaaaagat tgaatatgga gccacttgaa
540

tcttaaactt cagtctgcag ctataaccaa tatcatcaga agttatacac aattggcaaa
 600
 agaatagctt attctgccca aatacttgtc cagtcactag gatcatttca cttttttgaa
 660
 taccatttgc tttggggagg gaagtattgc cagaccgtga attcattatt acctctgatc
 720
 a
 721

<210> 2028
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2028
 Met Asn Ser Arg Ser Gly Asn Thr Ser Leu Pro Lys Ala Asn Gly Ile
 1 5 10 15
 Gln Lys Ser Glu Met Ile Leu Val Thr Gly Gln Val Phe Gly Gln Asn
 20 25 30
 Lys Leu Phe Phe Cys Gln Leu Cys Ile Thr Ser Asp Asp Ile Gly Tyr
 35 40 45
 Ser Cys Arg Leu Lys Phe Lys Ile Gln Val Ala Pro Tyr Ser Ile Phe
 50 55 60
 Leu His Lys Glu Arg Leu His Val Leu Ile Leu Cys Gly Leu Cys Tyr
 65 70 75 80
 Leu Arg Ser Asn Gln Glu Ser Leu Ile Leu Ser Gln Lys Cys Leu Leu
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 gattctttct actgtctggt cttcagtttg cataatccat attgttctct ctactagttc
 300
 actggtgctt ttgcctgccg gctctaattt actgttatcc ccttttagtga aattttttct
 360
 ttttttctct tctcattcca gttattatac agaactatct aacttcaaga tttgtggggg
 420

tttgttttgt tttgttttga gaccccatct caaaaaaaaa aaaaaccagc tttctctca
480
acttggggga acctt
495

```
<210> 2036
<211> 98
<212> PRT
<213> Homo sapiens
```

```

<400> 2036
Xaa Ile Pro Leu Leu Leu Ala Thr Gln Ala Gln Ala Thr Arg Ser His
  1             5             10             15
Asp Thr Ser Cys Leu His Phe Phe His Val Cys Met Tyr Val Cys Met
      20             25             30
Tyr Val Cys Met Tyr Val Cys Met Tyr Ala Xaa Met Phe Pro Phe His
      35             40             45
Leu Ala Cys Leu His Phe Cys Cys Tyr Cys Cys Tyr Leu Cys Val Gly
      50             55             60
Ala Pro Asn Gly Val Pro Tyr Phe Ser Asp Ala Val Phe Ile Phe Leu
 65             70             75             80
Asp Ser Ser Phe Tyr Cys Leu Val Phe Ser Leu His Asn Pro Tyr Cys Ser
      85             90             95
Leu Tyr

```

```
<210> 2037
<211> 327
<212> DNA
<213> Homo sapiens
```

```
<400> 2037
acgcgtgaag ggaaggggga gaccccgga gaaatggaga aatgggggcg cacacagacg
60
ggaagagtga gggtggagtg cctttccgc gctcatcttc cgtccccact ccacgcccag
120
caaatccaaa caccgcggcc tctggtgcc cgggcttcca ttccccctgg aggggcaagg
180
gcgtttcctc ttccgccc aa cggggcgct gagcggcggg aacagcggcg ggggctttgt
240
ggtcccgggg ggtccgagtg tgtgtcagg gctggggcgg gggatgggcg cggcccctgg
300
gtatccctca cggtcctggt tcatgag
327
```

```
<210> 2038
<211> 98
<212> PRT
<213> Homo sapiens
```

```
<400> 2038
Met Glu Lys Trp Gly Arg Thr Gln Thr Gly Arg Val Arg Leu Glu Cys
 1             5             10             15
Leu Ser Arg Ala His Leu Pro Ser Pro Leu His Ala Gln Gln Ile Gln
```

```

                20                25                30
Thr Pro Arg Pro Leu Val Ala Arg Ala Ser Ile Ser Pro Gly Gly Ala
      35                40                45
Arg Ala Phe Pro Leu Pro Pro Asn Arg Gly Ala Glu Arg Arg Glu Gln
      50                55                60
Arg Arg Gly Leu Cys Gly Pro Gly Gly Ser Glu Cys Val Ser Gly Ala
65      70                75                80
Gly Ala Gly Asp Gly Arg Gly Pro Trp Val Ser Leu Thr Val Leu Val
      85                90                95
His Glu

```

<210> 2039

<211> 307

<212> DNA

<213> Homo sapiens

<400> 2039

```

accggtgata cactctgcga aagcggccgc gagcgaagcg ttcttgggtct tcttcgagat
60
cgcgatgtat tgcccggaaa acagcggett gatgccgtca ttgagaggct ctgggccaac
120
accggtacgg gcatatgcct gggcggcatt cttttggatg ttgcgaagaa aggacgcatt
180
cggcgtgccg aaagccaggg atccttcacc gtagaccttg gaccgatgga ggcccccggc
240
aatcgagtcc ttcgaaattc ccccttggca tacatgtcgg ccacgtcgt cagccagagt
300
aacgcgt
307

```

<210> 2040

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2040

```

Met Ala Asp Met Tyr Ala Lys Gly Glu Phe Arg Arg Thr Arg Leu Pro
1      5      10      15
Gly Ala Ser Ile Gly Pro Arg Ser Thr Val Lys Asp Pro Trp Leu Ser
      20      25      30
Ala Arg Arg Met Arg Pro Phe Phe Ala Thr Ser Lys Arg Met Pro Pro
      35      40      45
Arg His Met Pro Val Pro Val Leu Ala Gln Ser Leu Ser Met Thr Ala
      50      55      60
Ser Ser Arg Cys Phe Pro Gly Asn Thr Ser Arg Ser Arg Arg Arg Pro
65      70      75      80
Arg Thr Leu Arg Ser Arg Pro Leu Ser Gln Ser Gly Ser Pro
      85      90

```

<210> 2041

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2041
 nnccggcgat gcagggatc gcccgcgatg cgctcgaacc cggcgcgggg ggcgttcttc
 60
 gccagcttcc tgccgttcgc cagacgcac gccgagggcg ggggtgcgcaa ttcgctcgcc
 120
 cagctgggtcg ccaagctgac cctgcccggc atgcccgcaca tctaccaggg ctgcgagatg
 180
 tgggacctca gcctggtcga ccgggacaat cgccgccccg tcgactacga gacacgcgac
 240
 gcggccctgg ccggctgggt cgcgaccccc cgaggaggaac gcgccgcggc gctgcgcacc
 300
 ctgctgacgg attggcgag cggcgcggtc aagctggccg tgacgcgt
 348

<210> 2042
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 2042
 Xaa Arg Arg Cys Arg Asp Ser Pro Ala Met Arg Ser Asn Pro Ala Arg
 1 5 10 15
 Gly Ala Phe Leu Ala Ser Phe Leu Pro Phe Ala Arg Arg Ile Ala Glu
 20 25 30
 Ala Gly Val Arg Asn Ser Leu Ala Gln Leu Val Ala Lys Leu Thr Leu
 35 40 45
 Pro Gly Met Pro Asp Ile Tyr Gln Gly Cys Glu Met Trp Asp Leu Ser
 50 55 60
 Leu Val Asp Arg Asp Asn Arg Arg Pro Val Asp Tyr Glu Thr Arg Asp
 65 70 75 80
 Ala Ala Leu Ala Gly Trp Val Ala Thr Pro Pro Glu Glu Arg Ala Ala
 85 90 95
 Ala Leu Arg Thr Leu Leu Thr Asp Trp Arg Ser Gly Ala Val Lys Leu
 100 105 110
 Ala Val Thr Arg
 115

<210> 2043
 <211> 712
 <212> DNA
 <213> Homo sapiens

<400> 2043
 gatctgacgg tctcgactaa gcctgacat tccgaggtca ccgacgccga ccttgccgtc
 60
 gaagattcgg tgcgagagc cctgtctcga atgcgtccc gggatgccgt ccacggcgag
 120
 gaacgtgccg ataccgggga tggacccgc cggatggatca ttgatccgat cgacggcact
 180
 gcgaattttc tgcgtaggggt ccagtggtg gccaccctca ttgccctcag cgtcgaggac
 240
 cagattgtcg catctgtgtg ctctgtctct gccctcaagc gacgctggtg ggcagcccgt
 300

ggctcaggag catggtcggg caaatccctg gcctcagcga caccgatcca cgtctcgaat
 360
 gtgcgcaatc ttgccgacgc attcttgtcc tactcttcgc tgcacggatg ggtcgagagc
 420
 ggaacgagggc acgggttcgg tgaactcatg cggtcggtgt ggccggaccg agccttcggc
 480
 gatttctggt cttacatgat ggtggcagaa ggtgtcgtcg atgtggcatg cgagccggaa
 540
 ctcagcctgc acgacatggc cgccctcgac gctatcgtca ccgaggcggg cggtaagtgc
 600
 accggtctcg atggcaaaga cggcccgtgg tctgggaatg ctctggcgtc gaatggtttc
 660
 cttcatgacc aggccttagc catggtccag cctcaggagt gagcaccgat cg
 712

<210> 2044

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2044

Asp	Leu	Thr	Val	Ser	Thr	Lys	Pro	Asp	His	Ser	Glu	Val	Thr	Asp	Ala
1				5				10						15	
Asp	Leu	Ala	Val	Glu	Asp	Ser	Val	Arg	Arg	Ala	Leu	Ser	Arg	Met	Arg
			20					25					30		
Ser	Arg	Asp	Ala	Val	His	Gly	Glu	Glu	Arg	Ala	Asp	Thr	Gly	Asp	Gly
		35					40					45			
Pro	Arg	Arg	Trp	Ile	Ile	Asp	Pro	Ile	Asp	Gly	Thr	Ala	Asn	Phe	Leu
	50					55					60				
Arg	Gly	Val	Pro	Val	Trp	Ala	Thr	Leu	Ile	Ala	Leu	Ser	Val	Glu	Asp
65				70				75						80	
Gln	Ile	Val	Ala	Ser	Val	Val	Ser	Ala	Pro	Ala	Leu	Lys	Arg	Arg	Trp
			85					90					95		
Trp	Ala	Ala	Arg	Gly	Ser	Gly	Ala	Trp	Ser	Gly	Lys	Ser	Leu	Ala	Ser
			100					105					110		
Ala	Thr	Pro	Ile	His	Val	Ser	Asn	Val	Arg	Asn	Leu	Ala	Asp	Ala	Phe
		115					120				125				
Leu	Ser	Tyr	Ser	Ser	Leu	His	Gly	Trp	Val	Glu	Ser	Gly	Arg	Gly	His
	130					135				140					
Gly	Phe	Gly	Glu	Leu	Met	Arg	Ser	Val	Trp	Arg	Thr	Arg	Ala	Phe	Gly
145				150					155					160	
Asp	Phe	Trp	Ser	Tyr	Met	Met	Val	Ala	Glu	Gly	Val	Val	Asp	Val	Ala
			165					170					175	.	
Cys	Glu	Pro	Glu	Leu	Ser	Leu	His	Asp	Met	Ala	Ala	Leu	Asp	Ala	Ile
		180					185					190			
Val	Thr	Glu	Ala	Gly	Gly	Lys	Phe	Thr	Gly	Leu	Asp	Gly	Lys	Asp	Gly
	195					200					205				
Pro	Trp	Ser	Gly	Asn	Ala	Leu	Ala	Ser	Asn	Gly	Phe	Leu	His	Asp	Gln
	210				215						220				
Ala	Leu	Ala	Met	Val	Gln	Pro	Gln	Glu							
225					230										

<210> 2045

<211> 406

<212> DNA

<213> Homo sapiens

<400> 2045

```

nnttgacac cggcgactat gccgccaccg cacggatcaa tcgcggaccc agggcagggg
60
atgcgccgga tgggcgacgg tgatggaccg ggcgctggac ctgggcggtc gcttcgacga
120
cantacaggc tttggccgag gcgggttgga agaaaccggg caaccggtgg tttggccccg
180
catcaatgcc cagaaccaga agccttgccg attcgtccca ggccgttcaa ggccgatggc
240
gagatcgctg cgatgactgg cgacgggtgtc aacgacgccc cctcgctcaa ggcgcccat
300
atcgggtgtg ccatggacaa acgcggcacc gacgtcgcgc gcgaggcttc cgccatggtc
360
ctgctcgagg atgattttgg atcgatcgtg cagtcggtcc ggctcg
406

```

<210> 2046

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2046

```

Xaa Trp Thr Pro Ala Thr Met Pro Pro Pro His Gly Ser Ile Ala Asp
1      5      10      15
Pro Gly Gln Gly Met Arg Arg Met Gly Asp Gly Asp Gly Pro Gly Ala
20      25      30
Gly Pro Gly Arg Ser Leu Arg Arg Xaa Tyr Arg Leu Trp Pro Arg Arg
35      40      45
Val Gly Arg Asn Arg Ser Thr Gly Gly Leu Ala Pro His Gln Cys Pro
50      55      60
Glu Pro Glu Ala Leu Arg Ile Arg Pro Arg Pro Phe Lys Ala Asp Gly
65      70      75      80
Glu Ile Val Ala Met Thr Gly Asp Gly Val Asn Asp Ala Pro Ser Leu
85      90      95
Lys Ala Ala His Ile Gly Val Ala Met Asp Lys Arg Gly Thr Asp Val
100     105     110
Ala Arg Glu Ala Ser Ala Met Val Leu Leu Glu Asp Asp Phe Gly Ser
115     120     125
Ile Val Gln Ser Val Arg Leu
130     135

```

<210> 2047

<211> 796

<212> DNA

<213> Homo sapiens

<400> 2047

```

aagcttttga acgagacccc tgagctctgg gttcagcccc gaggaagccc agcaacagga
60
tgaggaattt gagaagaaga ttccaagtgt ggaagacagc cttggagagg gcagcagggg
120

```

tgctggccgg ccaggagaga gaggatccgg gggcttggtc agtcctagca ctgcccacgt
 180
 gccggatggg gcactcgggc agagagacca gagcagctgg caaaacagtg atgctagcca
 240
 ggaggtggga gggcatcagg agagacagca ggcaggggct cagggccctg gcagtgtga
 300
 cctggaagat ggggagatgg gaaagcgagg ctgggtcggg gagtttagcc tcagtgttgg
 360
 cccccagcga gaggcagcat ttagcccagg gcagcaggac tggagccggg acttctgcat
 420
 cgaggccagt gagaggagct atcagtttgg catcattggc aacgacagag tgagtgggtgc
 480
 tggcttttagc ccttctagca agatggaagg tggtcacttt gtgcctcctg ggaagaccac
 540
 agctggctcg gtggactgga ctgaccagct gggctctcagg aacttggaag tgtccagctg
 600
 tgtgggttct gggggctcga gcgaggccag ggagagtgcc gtgggacaga tgggctggtc
 660
 aggtggcctg agcttgagag acatgaacct gaccggctgt ttggaagtg gagggctctga
 720
 agagccgggg ggaatcggaa ttggggagaa ggactggact tctgatgtta atgtgaagag
 780
 caaagatttg gctgag
 796

<210> 2048

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2048

Met	Gly	Lys	Arg	Gly	Trp	Val	Gly	Glu	Phe	Ser	Leu	Ser	Val	Gly	Pro
1				5				10						15	
Gln	Arg	Glu	Ala	Ala	Phe	Ser	Pro	Gly	Gln	Gln	Asp	Trp	Ser	Arg	Asp
			20					25					30		
Phe	Cys	Ile	Glu	Ala	Ser	Glu	Arg	Ser	Tyr	Gln	Phe	Gly	Ile	Ile	Gly
		35					40					45			
Asn	Asp	Arg	Val	Ser	Gly	Ala	Gly	Phe	Ser	Pro	Ser	Ser	Lys	Met	Glu
		50				55					60				
Gly	Gly	His	Phe	Val	Pro	Pro	Gly	Lys	Thr	Thr	Ala	Gly	Ser	Val	Asp
65					70				75					80	
Trp	Thr	Asp	Gln	Leu	Gly	Leu	Arg	Asn	Leu	Glu	Val	Ser	Ser	Cys	Val
				85				90						95	
Gly	Ser	Gly	Gly	Ser	Ser	Glu	Ala	Arg	Glu	Ser	Ala	Val	Gly	Gln	Met
			100				105					110			
Gly	Trp	Ser	Gly	Gly	Leu	Ser	Leu	Arg	Asp	Met	Asn	Leu	Thr	Gly	Cys
		115				120					125				
Leu	Glu	Ser	Gly	Gly	Ser	Glu	Glu	Pro	Gly	Gly	Ile	Gly	Ile	Gly	Glu
	130				135						140				
Lys	Asp	Trp	Thr	Ser	Asp	Val	Asn	Val	Lys	Ser	Lys	Asp	Leu	Ala	Glu
145					150				155						160

<210> 2049

<211> 516

<212> DNA

<213> Homo sapiens

<400> 2049

cgcgtcgctt acggtgcgct gaataccagc ctgctggcgc tggcggtcag cttcgcgctg
 60
 ctgttcctcg ggatagtgtt cgggctgatg ccacgtctga tgtgcggggg gattgaactg
 120
 gccaacgctc ccccgccaat cgccttgggc ctgttagtag tcgccattag cggcccttca
 180
 gcctacgggtg ccgcctgtgc ggtgatgttg gtcagttggg ctccgctggc cgccattgt
 240
 gcttcgttgt tggcggaagc ccgcacgcag ccctatatcc gcatgttgcc ggtattgggc
 300
 gtcggcgcgt gggcacgct gaccactac ctgctgccgg cgtctctctgc tccctgctg
 360
 cgccacgcca tggtgcgtct gccgggcatt gcgctggcgc tggcggcctt gggttttttt
 420
 ggtcttgggc cgcagccacc cagtgcagaa tgggggctgg tgctggcgga aggcattgct
 480
 tatctcgaac gggcgccctg gggagtcttg gcaccg
 516

<210> 2050

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2050

Arg	Val	Ala	Tyr	Gly	Ala	Leu	Asn	Thr	Ser	Leu	Leu	Ala	Leu	Ala	Val
1				5					10					15	
Ser	Phe	Ala	Ser	Leu	Phe	Leu	Gly	Ile	Val	Phe	Gly	Leu	Met	Pro	Arg
			20					25					30		
Leu	Met	Cys	Gly	Val	Ile	Glu	Leu	Ala	Asn	Ala	Pro	Pro	Pro	Ile	Ala
			35				40					45			
Leu	Gly	Leu	Leu	Val	Val	Ala	Ile	Ser	Gly	Pro	Ser	Ala	Tyr	Gly	Ala
	50					55					60				
Ala	Cys	Ala	Val	Met	Leu	Val	Ser	Trp	Ala	Pro	Leu	Ala	Ala	His	Cys
65					70					75				80	
Ala	Ser	Leu	Leu	Ala	Glu	Ala	Arg	Thr	Gln	Pro	Tyr	Ile	Arg	Met	Leu
			85						90					95	
Pro	Val	Leu	Gly	Val	Gly	Arg	Trp	Arg	Thr	Leu	Thr	His	Tyr	Leu	Leu
			100					105					110		
Pro	Ala	Leu	Ser	Ala	Pro	Leu	Leu	Arg	His	Ala	Met	Leu	Arg	Leu	Pro
		115					120					125			
Gly	Ile	Ala	Leu	Ala	Leu	Ala	Ala	Leu	Gly	Phe	Phe	Gly	Leu	Gly	Pro
	130					135					140				
Gln	Pro	Pro	Ser	Ala	Glu	Trp	Gly	Leu	Val	Leu	Ala	Glu	Gly	Met	Pro
145					150					155				160	
Tyr	Leu	Glu	Arg	Ala	Pro	Trp	Gly	Val	Leu	Ala	Pro				
			165					170							

<210> 2051

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2051

gagcaaaact atcggttctac cggcaatatt ctgaaaagtg ccaaccaact tatttcgaat
 60
 aatagtgatc gtctcggtaa gaatttatgg accgacggtg aaatggggga gccagtaggt
 120
 atttatgcag catttaatga attagatgag gcaaaatttg tggcgtctca aatccaaaat
 180
 tgggtagatg atgggtggga attagatgat tgtgctgttt tatatcgtag taatagccaa
 240
 tctcgtgtta ttgaagaagc cttgattcgt tgccaaattc cttatcgaat ttatggcggg
 300
 atgcgattct tcgaacgcca agaaattaaa gatgcgttgg catatttacg ttaattaat
 360
 aatcgtaag atgatgccgc atttgagcgt gtgattaata cgcctacgcg t
 411

<210> 2052

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2052

Glu	Gln	Asn	Tyr	Arg	Ser	Thr	Gly	Asn	Ile	Leu	Lys	Ser	Ala	Asn	Gln
1			5					10						15	
Leu	Ile	Ser	Asn	Asn	Ser	Asp	Arg	Leu	Gly	Lys	Asn	Leu	Trp	Thr	Asp
			20					25					30		
Gly	Glu	Met	Gly	Glu	Pro	Val	Gly	Ile	Tyr	Ala	Ala	Phe	Asn	Glu	Leu
		35					40					45			
Asp	Glu	Ala	Lys	Phe	Val	Ala	Ser	Gln	Ile	Gln	Asn	Trp	Val	Asp	Asp
		50				55					60				
Gly	Gly	Glu	Leu	Asp	Asp	Cys	Ala	Val	Leu	Tyr	Arg	Ser	Asn	Ser	Gln
65				70						75				80	
Ser	Arg	Val	Ile	Glu	Glu	Ala	Leu	Ile	Arg	Cys	Gln	Ile	Pro	Tyr	Arg
			85					90					95		
Ile	Tyr	Gly	Gly	Met	Arg	Phe	Phe	Glu	Arg	Gln	Glu	Ile	Lys	Asp	Ala
			100					105					110		
Leu	Ala	Tyr	Leu	Arg	Leu	Ile	Asn	Asn	Arg	Gln	Asp	Asp	Ala	Ala	Phe
		115					120					125			
Glu	Arg	Val	Ile	Asn	Thr	Pro	Thr	Arg							
		130				135									

<210> 2053

<211> 287

<212> DNA

<213> Homo sapiens

<400> 2053

nccatggaag ccttcaatct tgtaagagaa agtgaacagc tgttttccat atgccaaatc
 60
 ccgctcctct gctggatcct gtgtaccagt ctgaagcaag agatgcagaa aggaaaagac
 120

ctggccctga cctgccagag cactacctct gtgtactcct ctttcgtctt taacctgttc
 180
 acacctgagg gtgccgaggg cccgactccg caaaccagc accagctgaa ggcctgtgc
 240
 tccctggctg cagagggat gtggacagac acatttgagt tttgtga
 287

<210> 2054
 <211> 79
 <212> PRT
 <213> Homo sapiens

<400> 2054
 Ile Cys Gln Ile Pro Leu Leu Cys Trp Ile Leu Cys Thr Ser Leu Lys
 1 5 10 15
 Gln Glu Met Gln Lys Gly Lys Asp Leu Ala Leu Thr Cys Gln Ser Thr
 20 25 30
 Thr Ser Val Tyr Ser Ser Phe Val Phe Asn Leu Phe Thr Pro Glu Gly
 35 40 45
 Ala Glu Gly Pro Thr Pro Gln Thr Gln His Gln Leu Lys Ala Leu Cys
 50 55 60
 Ser Leu Ala Ala Glu Gly Met Trp Thr Asp Thr Phe Glu Phe Cys
 65 70 75

<210> 2055
 <211> 298
 <212> DNA
 <213> Homo sapiens

<400> 2055
 nnacgcgttg ttatgaacaa tgacggtgtc ctctaccccg atacctgcgt gggactgat
 60
 tccacacca ccatggaaaa tggctctggc attctgggct ggggcgtcgg tggattgaa
 120
 gccgaggctg ctatgcttgg ccagcccatc tccatgctta tccccgtgt tgttggttt
 180
 aaacttactg gccaaacaca gccgggtgtc accgctacag atgttgttct taccattact
 240
 gatatgcttc gccagcatgg tgtgggtgga aaattcgggg aattctatgg gggaagcg
 298

<210> 2056
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2056
 Xaa Arg Val Val Met Asn Asn Asp Gly Val Leu Tyr Pro Asp Thr Cys
 1 5 10 15
 Val Gly Thr Asp Ser His Thr Thr Met Glu Asn Gly Leu Gly Ile Leu
 20 25 30
 Gly Trp Gly Val Gly Gly Ile Glu Ala Glu Ala Ala Met Leu Gly Gln
 35 40 45
 Pro Ile Ser Met Leu Ile Pro Arg Val Val Gly Phe Lys Leu Thr Gly

```

      50              55              60
Gln Thr Gln Pro Gly Val Thr Ala Thr Asp Val Val Leu Thr Ile Thr
65              70              75              80
Asp Met Leu Arg Gln His Gly Val Gly Gly Lys Phe Gly Glu Phe Tyr
      85              90              95
Gly Gly Ser

```

<210> 2057
 <211> 569
 <212> DNA
 <213> Homo sapiens

```

<400> 2057
acgcgtcccc acagtaccga ctataacgga ggaaactatc aggaacggta taaaatttta
60
gcagaaattc gtaaggctct tgaagacgga gatcgccaaa aagccaaacg attagctgaa
120
caaaatctag ttggacccaaa caacgccccag tatggtcggt atctagcctt tggatgatc
180
ttcatggctc tcaataacca gaaaaagggg ctggatacag ttacagacta tcaccgtggt
240
ttggatatca cagaagccac tactacaact tcttacaccc aagatgggaac gacctttaa
300
agagaaacct tctcaagtta ccctgatgat gttactgtta ctcaattgac caaaaaagg
360
gacaaaaaac ttgattttac agtttgggaat agcttaacag aagatttact tgctaacgga
420
gactactcag cggaatatcc taactacaag agtggccatg ttacgacaga cccaaatggt
480
atcctactaa aaggtacagt caaagataat ggccctccagt tcgcataccta tctaggaatt
540
aaaacggacg gaaaagttac tgttcatga
569

```

<210> 2058
 <211> 128
 <212> PRT
 <213> Homo sapiens

```

<400> 2058
Met Val Phe Asn Asn Gln Lys Lys Gly Leu Asp Thr Val Thr Asp Tyr
1              5              10              15
His Arg Gly Leu Asp Ile Thr Glu Ala Thr Thr Thr Thr Ser Tyr Thr
      20              25              30
Gln Asp Gly Thr Thr Phe Lys Arg Glu Thr Phe Ser Ser Tyr Pro Asp
      35              40              45
Asp Val Thr Val Thr His Leu Thr Gln Lys Gly Asp Lys Lys Leu Asp
      50              55              60
Phe Thr Val Trp Asn Ser Leu Thr Glu Asp Leu Leu Ala Asn Gly Asp
65              70              75              80
Tyr Ser Ala Glu Tyr Ser Asn Tyr Lys Ser Gly His Val Thr Thr Asp
      85              90              95
Pro Asn Gly Ile Leu Leu Lys Gly Thr Val Lys Asp Asn Gly Leu Gln

```


	100		105		110										
Phe	Ala	Ser	Tyr	Leu	Gly	Ile	Lys	Thr	Asp	Gly	Lys	Val	Thr	Val	His
	115				120						125				

<210> 2059

<211> 644

<212> DNA

<213> Homo sapiens

<400> 2059

gaattcgtgc caccgtgcc atacttcgcc acgcaacaga gtgccgtcag cggattgggc
60

agcaatcgac ctgtaggact cagccatgat cgactgggca tcctcgtata gtcgcgatgc
120

cgcaaccgcc tgcgtttcca agcctgcagc gacgtaagag gccctctcac aactgaacc
180

gatcgctcca gacaacgtgg aagcgataac ctgcgctcgc ttctgctgat tctgggcaa
240

gctcgacaag aagaaccgca gaggggagac ggccctgggtca gggagcgcac cttcagcgtt
300

cgtcttggtc tccgggacag caaaaagcgg ggaatcagcc aggccacgct ccgtcatgag
360

tcggccgagg tccgcgggta cctctctcat ggcttcacaca ggaacgcggg cacacaccac
420

cgcgatcgac gcgtgcctct cttgagcctc gttgaggaaa tcccacggca cagcgtcagc
480

gtagcgggct gctgaggtga caaagatcca cagatccgcg gcctggagca actgagccgc
540

cagatcacga ttgcgggtca ccacagagtc gatgtccggg gcatcgagga tggccaaacc
600

tcgcggaatc cttgactccg cgacgagctg caaactcgac gcgt
644

<210> 2060

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2060

Met	Arg	Glu	Val	Pro	Ala	Asp	Leu	Gly	Arg	Leu	Met	Thr	Glu	Arg	Gly
1				5				10					15		

Leu	Ala	Asp	Ser	Pro	Leu	Phe	Ala	Val	Pro	Glu	Thr	Lys	Thr	Asn	Ala
		20					25						30		

Glu	Gly	Ala	Leu	Pro	Asp	Gln	Ala	Val	Ala	Pro	Leu	Arg	Phe	Phe	Leu
		35				40					45				

Ser	Ser	Leu	Ala	Gln	Asn	Gln	Gln	Lys	Arg	Arg	Glu	Val	Ile	Ala	Ser
	50				55					60					

Thr	Leu	Ser	Gly	Ala	Ile	Gly	Ser	Val	Cys	Glu	Arg	Ala	Ser	Tyr	Val
65				70				75				80			

Ala	Ala	Gly	Leu	Glu	Ala	Gln	Ala	Val	Ala	Ala	Ser	Arg	Leu	Tyr	Glu
			85				90						95		

Asp	Ala	Gln	Ser	Ile	Met	Ala	Glu	Ser	Tyr	Arg	Ser	Ile	Ala	Ala	Gln
		100					105					110			

Ser	Ala	Asp	Gly	Thr	Leu	Leu	Arg	Gly	Glu	Val	Leu	Ala	Arg	Trp	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

115 120 125

Glu Phe
130

<210> 2061
<211> 481
<212> DNA
<213> Homo sapiens

<400> 2061
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60
atgctgtgat tacgcgccag ccccgtcaca ccgtacgggt ggtaggactg ggcaaagaag
120
acgccgccac ctggatgcac tgaggtgtgc acagccacgt ggagatgatg ctggggggctc
180
acggtgactc tcaggaggcc ctggcctggc ctatctggag ccttctctgt gaaatgaggg
240
tggtaacgcc cactagcagg gttgtagggg acatggatct gtggccacct cctcaagggt
300
tgccacacgc accaggtcct gactgggagt ccggccccca gggcctgtgg atggttggcc
360
tgggcccagc ctccgcccc aaggggtgctg gcacctggca tgtgcccgcac agttggggcc
420
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480
t
481

<210> 2062
<211> 133
<212> PRT
<213> Homo sapiens

<400> 2062
Met Pro Gly Ala Ser Thr Leu Gly Gly Gly Gly Trp Ala Gln Ala Ser
1 5 10 15
His Pro Gln Ala Leu Gly Ala Gly Leu Pro Val Arg Thr Trp Cys Val
20 25 30
Trp Gln Pro Leu Arg Arg Trp Pro Gln Ile His Val Pro Tyr Asn Pro
35 40 45
Ala Ser Gly Arg Tyr Gln Pro His Phe Thr Glu Lys Ala Pro Asp Arg
50 55 60
Pro Gly Gln Gly Leu Leu Arg Val Thr Val Ser Pro Gln His His Leu
65 70 75 80
His Val Ala Val His Thr Ser Val His Pro Gly Gly Gly Val Phe Phe
85 90 95
Ala Gln Ser Tyr His Pro Tyr Gly Val Thr Gly Leu Ala Arg Asn His
100 105 110
Ser Ile Trp Gly His Thr Met Ala Thr Pro Ala Pro Ser Cys Val Ala
115 120 125
Leu Leu Thr Arg Leu
130

<210> 2063
 <211> 419
 <212> DNA
 <213> Homo sapiens

<400> 2063
 gccggcgccg tcgagcgcg gcctttcaat atcgaggccc aagacatggt gctgctcatc
 60
 gcggacacca atgccccgca catgctttcc gacggccaat acgcctcccg ccggggcatc
 120
 atcgacgcgg tccaatctgc cgccggttgc tccatccgcg agatctcgaa tgcggtggac
 180
 tttgccgcca ccgtcaatcc cgccgaggcg gaactctatc gccgcccgt gcaccacgtg
 240
 gtggaagaaa ccaaccggac cctagatgcc gctaccgcg tggcatcttc cgatctagat
 300
 acattccggc ggcttatgcg cgagagccac atctccctgc gcgaccttta tgaggtcacc
 360
 actcgggagc tcgaactcgt tttaccgcg gccggcgagc tgggcgctcg catgannnn
 419

<210> 2064
 <211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2064
 Ala Gly Ala Val Glu Arg Val Pro Phe Asn Ile Glu Ala Gln Asp Met
 1 5 10 15
 Val Leu Leu Ile Ala Asp Thr Asn Ala Pro His Met Leu Ser Asp Gly
 20 25 30
 Gln Tyr Ala Ser Arg Arg Gly Ile Ile Asp Ala Val Gln Ser Ala Ala
 35 40 45
 Gly Cys Ser Ile Arg Glu Ile Ser Asn Ala Val Asp Phe Ala Ala Thr
 50 55 60
 Val Asn Pro Ala Glu Ala Glu Leu Tyr Arg Arg Val His His Val
 65 70 75 80
 Val Glu Glu Thr Asn Arg Thr Leu Asp Ala Ala Thr Ala Leu Ala Ser
 85 90 95
 Ser Asp Leu Asp Thr Phe Arg Arg Leu Met Arg Glu Ser His Ile Ser
 100 105 110
 Leu Arg Asp Leu Tyr Glu Val Thr Thr Pro Glu Leu Asp Ser Val Phe
 115 120 125
 Thr Ala Ala Gly Glu Leu Gly Ala Arg Met Xaa
 130 135

<210> 2065
 <211> 598
 <212> DNA
 <213> Homo sapiens

<400> 2065
 gccggcgcta tggcctctct gctcgccgac gccgccgatg cccttcccg cgcaaagggtg
 60

cgcgcgaccg ttactggatc ggcgggattg ggaaccgcag aggcattggg ccttactttc
 120
 attcaggagg tcatagctga gacggccgcc gtccaacgtt ggaatcccca cgccgacgtg
 180
 cttctcgaac tcggtggtga ggatgccaag atcacctacc ttaagccggt ccccgaaacag
 240
 cgcataaatg gttcgtgtgc tgggtggcacc ggtgccttca tcgaccagat ggctaccctg
 300
 ctgcacaccg acactcccgg cctcaatgac ctgcacatccc gagccaagac catccatccg
 360
 atgcctcgc gctgtggtgt ttttgccaag tccgaccttc agccccctcat taacgagggga
 420
 gcccgccacg aggatctggc tgcttcggtc ctgcaggctg tcgccactca gtgcattgcc
 480
 ggcttggcat gtggtcgccc gattcgaggt aaggtcatct tccttggcgg tccgcttcac
 540
 tttatgcca gtttgcgaga cgctttctcg cgcgtcctcg acggttaagg tgacgcgt
 598

<210> 2066

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2066

Ala	Gly	Ala	Met	Ala	Ser	Leu	Leu	Ala	Asp	Ala	Ala	Asp	Ala	Leu	Pro
1				5					10					15	
Gly	Ala	Lys	Val	Arg	Ala	Thr	Val	Thr	Gly	Ser	Ala	Gly	Leu	Gly	Thr
			20					25					30		
Ala	Glu	Ala	Leu	Gly	Leu	Thr	Phe	Ile	Gln	Glu	Val	Ile	Ala	Glu	Thr
			35				40					45			
Ala	Ala	Val	Gln	Arg	Trp	Asn	Pro	Asp	Ala	Asp	Val	Leu	Leu	Glu	Leu
		50				55					60				
Gly	Gly	Glu	Asp	Ala	Lys	Ile	Thr	Tyr	Leu	Lys	Pro	Val	Pro	Glu	Gln
65					70					75				80	
Arg	Met	Asn	Gly	Ser	Cys	Ala	Gly	Gly	Thr	Gly	Ala	Phe	Ile	Asp	Gln
				85					90					95	
Met	Ala	Thr	Leu	Leu	His	Thr	Asp	Thr	Pro	Gly	Leu	Asn	Asp	Leu	Ala
			100					105						110	
Ser	Arg	Ala	Lys	Thr	Ile	His	Pro	Ile	Ala	Ser	Arg	Cys	Gly	Val	Phe
		115					120					125			
Ala	Lys	Ser	Asp	Leu	Gln	Pro	Leu	Ile	Asn	Glu	Gly	Ala	Arg	His	Glu
		130				135					140				
Asp	Leu	Ala	Ala	Ser	Val	Leu	Gln	Ala	Val	Ala	Thr	Gln	Cys	Ile	Ala
145					150				155					160	
Gly	Leu	Ala	Cys	Gly	Arg	Pro	Ile	Arg	Gly	Lys	Val	Ile	Phe	Leu	Gly
			165					170						175	
Gly	Pro	Leu	His	Phe	Met	Pro	Ser	Leu	Arg	Asp	Ala	Phe	Ser	Arg	Val
			180					185						190	
Leu	Asp	Gly	Lys	Val	Asp	Ala									
			195												

<210> 2067

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2067

ttccagcaga tgctgcaaac ctggacccgc agcggcacgc tgcaggaggc cgtggccaac
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 aagatcgccg aatggctgga tgccgacctg caacagtggg acatttcccg cgatgcaccg
 120
 tacttcggtt tcgagatccc gggcgagcca ggcaagtatt tctacgtgtg gctggacgcg
 180
 ccgacggcgt acatggccag tttcaagaac ctgtgcgacc gcacgccgga gctggacttc
 240
 gatgctttct gggccaagga ctccaccgcc gagctgtacc atttcacgg caaggacatc
 300
 gtcaacttcc acgccctggt ctggccggcg atgctcgaag gctcgggcta ccgtaaaccg
 360
 accggt
 366

<210> 2068

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2068

Phe	Gln	Gln	Met	Leu	Gln	Thr	Trp	Thr	Arg	Ser	Gly	Thr	Leu	Gln	Glu
1				5					10					15	
Ala	Val	Ala	Asn	Lys	Ile	Ala	Glu	Trp	Leu	Asp	Ala	Asp	Leu	Gln	Gln
			20					25					30		
Trp	Asp	Ile	Ser	Arg	Asp	Ala	Pro	Tyr	Phe	Gly	Phe	Glu	Ile	Pro	Gly
		35				40						45			
Glu	Pro	Gly	Lys	Tyr	Phe	Tyr	Val	Trp	Leu	Asp	Ala	Pro	Ile	Gly	Tyr
	50					55					60				
Met	Ala	Ser	Phe	Lys	Asn	Leu	Cys	Asp	Arg	Thr	Pro	Glu	Leu	Asp	Phe
65				70					75					80	
Asp	Ala	Phe	Trp	Ala	Lys	Asp	Ser	Thr	Ala	Glu	Leu	Tyr	His	Phe	Ile
			85						90					95	
Gly	Lys	Asp	Ile	Val	Asn	Phe	His	Ala	Leu	Phe	Trp	Pro	Ala	Met	Leu
			100					105					110		
Glu	Gly	Ser	Gly	Tyr	Arg	Lys	Pro	Thr	Gly						
		115					120								

<210> 2069

<211> 280

<212> DNA

<213> Homo sapiens

<400> 2069

cctagagagg atggtggaga ctgtgcgtgt gcagggtgtt ccggaacctt ccctgggatg
 60
 catggggcct cgccgcaggc catctctcca gacctgggct caccctgccc ctgtgctgtt
 120
 gcctttggct ggaattccac cccagccttc ttgectcaag aacgcccttc ccccttcaga
 180

tctcatgggc acaggccccg tcttcctaaa cggggtcaga gccccagta atcatgacaa
 240
 agaccctctc ctogatcaag ctttgggtcaa gctcctaccc
 280

<210> 2070

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2070

Met	Val	Glu	Thr	Val	Arg	Val	Gln	Gly	Val	Pro	Glu	Pro	Ser	Leu	Gly
1				5				10						15	
Cys	Met	Gly	Pro	Arg	Arg	Arg	Pro	Ser	Leu	Gln	Thr	Trp	Ala	His	Pro
			20				25						30		
Ala	Pro	Val	Leu	Leu	Pro	Leu	Ala	Gly	Ile	Pro	Pro	Gln	Pro	Ser	Cys
		35				40						45			
Leu	Lys	Asn	Ala	Leu	Pro	Pro	Ser	Asp	Leu	Met	Gly	Thr	Gly	Pro	Val
	50					55					60				
Phe	Leu	Asn	Gly	Val	Arg	Ala	Pro	Ser	Asn	His	Asp	Lys	Asp	Pro	Leu
65					70					75					80
Leu	Asp	Gln	Ala	Leu	Val	Lys	Leu	Leu	Pro						
				85					90						

<210> 2071

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2071

acgcgtgtcc agcagactta gaaagcaggt tcctcttgtc atacagcacg ttaacatagc
 60
 tgacgaggcc tgggtgtctt catcagtact gtgatgactc tttcaccttt gacttcagat
 120
 gctggcgctt tttacttttt gtgccaaact ctacacatga aacacttttg gaataactac
 180
 agacatgact ttctttatct ggggaaaagg agggcattaa accagattag gggctgggag
 240
 gggaggttgt caggggatga gctgctcctg aggaagaggc agagatcaag cttcactcag
 300
 cagctggatt ctcacctagt ttatagactg aaatcctgca aggtgggttac aacagtgaac
 360
 aatatgttca tacataaaga ctctaccctc aggtgatca
 399

<210> 2072

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2072

Met	Thr	Leu	Ser	Pro	Leu	Thr	Ser	Asp	Ala	Gly	Ala	Phe	Tyr	Phe	Leu
1				5				10						15	
Cys	Gln	Thr	Leu	His	Met	Lys	His	Phe	Trp	Asn	Asn	Tyr	Arg	His	Asp

```

                20                25                30
Phe Leu Tyr Leu Gly Lys Arg Arg Ala Leu Asn Gln Ile Arg Gly Trp
                35                40                45
Glu Gly Arg Leu Ser Gly Asp Glu Leu Leu Leu Arg Lys Arg Gln Arg
                50                55                60
Ser Ser Phe Thr Gln Gln Leu Asp Ser His Leu Val Tyr Arg Leu Lys
65                70                75                80
Ser Cys Lys Val Val Thr Thr Val Asn Asn Met Phe Ile His Lys Asp
                85                90                95
Ser Thr Leu Arg
                100

```

<210> 2073
 <211> 339
 <212> DNA
 <213> Homo sapiens

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<400> 2073
ggatccactt ctgtgccttt ccagcttcta gaggetgcct gcgttccttg gctcgtggcc
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ccttccctcca ccttcaagcc agcagcggag gcctgagtc tttctcatgcc atctctctgt
120
tctctctctt gcctcctcct ccacactgaa ggaccctgt gatcacactg gccccccac
180
cggatgaccc aggataatcc atctccctgt ttgaaggctg gctgattagc aaccttcatt
240
ccatctgcct ccttcattcc ccctggccat gtaatgggat tcacagcttc tggggattag
300
gacatggaca tcttgtggcg ggggcataat tctgtcgac
339

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<210> 2074
 <211> 85
 <212> PRT
 <213> Homo sapiens

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<400> 2074
Met Lys Glu Ala Asp Gly Met Lys Val Ala Asn Gln Pro Thr Phe Lys
1                5                10                15
Gln Gly Asp Gly Leu Ser Trp Val Ile Arg Trp Gly Gly Gln Cys Asp
                20                25                30
His Arg Gly Pro Ser Val Trp Arg Arg Arg Gln Glu Arg Glu Gln Arg
                35                40                45
Asp Gly Met Arg Arg Thr Gln Ala Ser Ala Ala Gly Leu Lys Val Glu
50                55                60
Glu Gly Ala Thr Ser Gln Gly Thr Gln Ala Ala Ser Arg Ser Trp Lys
65                70                75                80
Gly Thr Glu Val Asp
                85

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<210> 2075
 <211> 481
 <212> DNA
 <213> Homo sapiens

<400> 2075
 ntggccagggt tgacctcaaa ggtgtacatt gttttatgtg ggcacaatgg actgtcagaa
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 accaaggagc tctcctgtcc agagaagtcc ctgtttgaaa ggaattccag acacaccttt
 120
 atcctgagcg ctcttgccca actgggcctg ctgaggaaga tccgcctctg gcacgacagc
 180
 cgtgggcctt cccagggctg gttcatcagc cacgtgatgg tgaaggagct gcacacggga
 240
 cagggctgggt tcttccctgc ccagtgtgg ctgtctgccg gcaggcatga tggtcgctg
 300
 gagcgggagc tcacctgtct gcaaggggga ctcggttctt ggaagctttt ctattgcaag
 360
 ttcacagagt acctggagga tttccatgtc tggctgtcgg tgtacagcag gccctcctcc
 420
 agccgctacc tgcacacgcc gcgccccacc gtgtccttct cctgtgtgtg cgtctacgcg
 480
 t
 481

<210> 2076
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 2076
 Xaa Ala Arg Leu Thr Ser Lys Val Tyr Ile Val Leu Cys Gly Asp Asn
 1 5 10 15
 Gly Leu Ser Glu Thr Lys Glu Leu Ser Cys Pro Glu Lys Ser Leu Phe
 20 25 30
 Glu Arg Asn Ser Arg His Thr Phe Ile Leu Ser Ala Pro Ala Gln Leu
 35 40 45
 Gly Leu Leu Arg Lys Ile Arg Leu Trp His Asp Ser Arg Gly Pro Ser
 50 55 60
 Pro Gly Trp Phe Ile Ser His Val Met Val Lys Glu Leu His Thr Gly
 65 70 75 80
 Gln Gly Trp Phe Phe Pro Ala Gln Cys Trp Leu Ser Ala Gly Arg His
 85 90 95
 Asp Gly Arg Val Glu Arg Glu Leu Thr Cys Leu Gln Gly Gly Leu Gly
 100 105 110
 Phe Trp Lys Leu Phe Tyr Cys Lys Phe Thr Glu Tyr Leu Glu Asp Phe
 115 120 125
 His Val Trp Leu Ser Val Tyr Ser Arg Pro Ser Ser Ser Arg Tyr Leu
 130 135 140
 His Thr Pro Arg Pro Thr Val Ser Phe Ser Leu Cys Val Tyr Ala
 145 150 155 160

<210> 2077
 <211> 1410
 <212> DNA
 <213> Homo sapiens

<400> 2077

ncagagtgtt ttgagctatc tggatatccca aatgatgtga atactttcag aaaccaatgg
60
caaattgaac ccaactgttt gcgaattcgg cacgagtaaa gatctttttt ttttttttgt
120
tttttttttt tttttttttt ttttgctttc taaagtggct ttaatatcac acaagcggct
180
ctttggtcta cagtgagaga aaacagaggg agccaggaaa ggctccccgc tggcctctgg
240
agtccaggag ccttaggaag gctgaaaaca gccctgacca gcaggcttag ttgtcctgag
300
aagagccagt gaggccacct ggtccagttc accaggtttc ccagggaagc acaggcatct
360
ctgggtcccc gagcacagtg ccagggaaga ccccccaat ccccatctga acaggccgag
420
ggcagcatgg gaaaggctca gactgcaggt tcatcccgca ggatggtaag gacacgtgct
480
cctccctcgc aagagcaggc ttgtgcacag cccggcacag ggccagccag ggcggcccct
540
gcggctgtgc agcgcttacc agggggagga gttcagccat caggaccttt tccaagtgga
600
tctgctggtc cagcacagcc actcgcagct tgagggccgc cagggtctgc agctcctggg
660
tgctggagta gacaagcagc tgggnnggct ccatgcaggc tccgctctac cccacagga
720
cggcgaggct ccgggggggc tnnccccaca gacatggtct tgggtggctgt tccgccaccg
780
ctgcacgcag ctctgcagc ctgtgcagac actggcccac catggcctgc agccctcca
840
gcgtgagcag gcagcggtag tcctgcatcc agtccatggg ggctgctgag agctcctccc
900
tcatgcgcag tctcagcagc gagcaggcct tccgcaggcg ccccgctcc gcctccacct
960
ccacagcact gagcctgggc tggggcccgc ctgaagctgt ctgcatgttc tggaggaact
1020
gggtttttggc agcggcggca tccgtggaat cactggtctg tgtggaactg agctgggccc
1080
acaggctcga gttctgggaa gctgctttcc tgaatgccgc aggcagccgc agcaggtgcc
1140
ccttctcctt gagtgtgaag gcttctgggg cctgaggagc agcggatggg gccatttgct
1200
ggtccctgag gcccgcccca ggctggggg ttcgggctcc catcccaaca cgggtcccat
1260
ccccactga cagcagccgg cgctcagggg ggcccttggc aggcaccgtg gtctggcgga
1320
ggcccttggg ggggtctcgtg tctgaagcat ggccaccagc ttggcctggg gaatgcggtg
1380
gggcggaggc tgctcgtgcca gaagaggtga
1410

<210> 2078

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2078

Gly His Leu Val Gln Phe Thr Arg Phe Pro Arg Glu Ala Gln Ala Ser
 1 5 10 15
 Leu Gly Pro Arg Ala Gln Cys Gln Gly Arg His Pro Gln Ser Pro Ser
 20 25 30
 Glu Gln Ala Glu Gly Ser Met Gly Lys Ala Gln Thr Ala Gly Ser Ser
 35 40 45
 Arg Arg Met Val Arg Thr Arg Ala Pro Pro Ser Gln Glu Gln Ala Cys
 50 55 60
 Ala Gln Pro Gly Thr Gly Pro Ala Arg Ala Ala Pro Ala Ala Val Gln
 65 70 75 80
 Arg Leu Pro Gly Gly Gly Val Gln Pro Ser Gly Pro Phe Pro Ser Gly
 85 90 95
 Ser Ala Gly Pro Ala Gln Pro Leu Ala Ala
 100 105

<210> 2079

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2079

atttacctcg caaccgaccc tgatcgtgaa ggtgaaagca tcagctggca catccagcag
 60
 gtactggcgg tcaaatccta caaacgcatt accttcaacg agatcactct caagcgcgtt
 120
 gaagaggcac tggccaatcc tcgacaaatc gatctgaaca gagttgcctc acaggaatgc
 180
 cggcgtgtgc ttgaccgctt ggtgggggtac ctgggtgaccc aagagttgcg gcgcctgatg
 240
 ggcaaaccta ctccgctgg cgcggttcaa tcaccgcgcg tgtttcttgt ggtcttgccg
 300
 gaacgcgaga tccgcaactt tcaggtgatc aatcactttg gcgtgcgtct gttctttgcc
 360
 gatgtaagtc ggggcaccac ttggtatgcc gagtggcaac cggtagcgga ttccgcaagc
 420
 aagcacttcc cctatgttca ggatagcaac ctggctcagc acgtcgccgg cactcgaaat
 480
 gtggctcgtg agtcctgcga ggatcgcaag gccgagcgtc atcctcctgc accattcatc
 540
 tcattcactc ttcaacaggc cgcca
 565

<210> 2080

<211> 188

<212> PRT

<213> Homo sapiens

<400> 2080

Ile Tyr Leu Ala Thr Asp Pro Asp Arg Glu Gly Glu Ser Ile Ser Trp
 1 5 10 15
 His Ile Gln Gln Val Leu Ala Val Lys Ser Tyr Lys Arg Ile Thr Phe
 20 25 30
 Asn Glu Ile Thr Leu Lys Arg Val Glu Glu Ala Leu Ala Asn Pro Arg

```

          35          40          45
Gln Ile Asp Leu Asn Arg Val Ala Ser Gln Glu Cys Arg Arg Val Leu
  50          55          60
Asp Arg Leu Val Gly Tyr Leu Val Thr Gln Glu Leu Arg Arg Leu Met
  65          70          75          80
Gly Lys Pro Thr Ser Ala Gly Arg Val Gln Ser Pro Ala Val Phe Leu
          85          90          95
Val Val Leu Arg Glu Arg Glu Ile Arg Asn Phe Gln Val Ile Asn His
          100          105          110
Phe Gly Val Arg Leu Phe Phe Ala Asp Val Ser Arg Gly Thr Thr Trp
          115          120          125
Tyr Ala Glu Trp Gln Pro Val Pro Asp Phe Ala Ser Lys His Phe Pro
          130          135          140
Tyr Val Gln Asp Ser Asn Leu Ala Gln His Val Ala Gly Thr Arg Asn
          145          150          155          160
Val Val Val Glu Ser Cys Glu Asp Arg Lys Ala Glu Arg His Pro Pro
          165          170          175
Ala Pro Phe Ile Ser Ser Thr Leu Gln Ala Ala
          180          185

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<210> 2081
 <211> 319
 <212> DNA
 <213> Homo sapiens

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<400> 2081
aagcttatgg aaaaacgggg atacggagag gagtatataa atcgctataa aatgatgaca
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aggttccatc atcaacgggt tccactagta attttgggtgt gtggaactgc ctgtactgga
120
aaatcaacaa tcgctacaca acttgctcag aggctcaatt tgcctaattgt tttgcagacg
180
gacatgggtgt atgagctgct gcgacatca acagatgcgc cacttacttc agttcctgtg
240
tgggctcgcg attttaattc acctgaagag cttatcactg aattctgcag agaatgcaga
300
gttgtagca aggggttgg
319

```

<210> 2082
 <211> 106
 <212> PRT
 <213> Homo sapiens

```

<400> 2082
Lys Leu Met Glu Lys Arg Gly Tyr Gly Glu Glu Tyr Ile Asn Arg Tyr
  1          5          10          15
Lys Met Met Thr Arg Phe His His Gln Arg Val Pro Leu Val Ile Leu
          20          25          30
Val Cys Gly Thr Ala Cys Thr Gly Lys Ser Thr Ile Ala Thr Gln Leu
          35          40          45
Ala Gln Arg Leu Asn Leu Pro Asn Val Leu Gln Thr Asp Met Val Tyr
          50          55          60
Glu Leu Leu Arg Thr Ser Thr Asp Ala Pro Leu Thr Ser Val Pro Val

```

```

65              70              75              80
Trp Ala Arg Asp Phe Asn Ser Pro Glu Glu Leu Ile Thr Glu Phe Cys
              85              90              95
Arg Glu Cys Arg Val Val Arg Lys Gly Leu
              100              105

```

<210> 2083
 <211> 382
 <212> DNA
 <213> Homo sapiens

```

<400> 2083
nngcctgatt ggcacatggc cgtcgagtgc gctgtaacac gcaagcagct atataccatc
60
atacctactg ttgaatgcaa ctgtggccac gttttctgct ttggctgtgg tttggatgga
120
caccagccgg tcatttgtgc tgttgccgc ttgtggctga aaaaatgtgc ggatgacagt
180
gagacgtcca actggatcgg cgtataacc aaggaatgcc ccaaactgtg ttcgacgatt
240
gaaaagaatg gcggatgtaa tcatatgacg tgtcgcaagt gcaaatacga attttgttgg
300
atttgctcgg gcccatggtc ggagcacgga aacaactatt acaactgcaa tcggtacgat
360
gaaaaggcag gagatgaagg tn
382

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<210> 2084
 <211> 127
 <212> PRT
 <213> Homo sapiens

```

<400> 2084
Xaa Pro Asp Cys Asp Met Ala Val Glu Cys Ala Val Thr Arg Lys Gln
1              5              10              15
Leu Tyr Thr Ile Ile Pro Thr Val Glu Cys Asn Cys Gly His Val Phe
              20              25              30
Cys Phe Gly Cys Gly Leu Asp Gly His Gln Pro Val Ile Cys Ala Val
              35              40              45
Val Arg Leu Trp Leu Lys Lys Cys Ala Asp Asp Ser Glu Thr Ser Asn
              50              55              60
Trp Ile Gly Ala Asn Thr Lys Glu Cys Pro Lys Cys Cys Ser Thr Ile
65              70              75              80
Glu Lys Asn Gly Gly Cys Asn His Met Thr Cys Arg Lys Cys Lys Tyr
              85              90              95
Glu Phe Cys Trp Ile Cys Ser Gly Pro Trp Ser Glu His Gly Asn Asn
              100              105              110
Tyr Tyr Asn Cys Asn Arg Tyr Asp Glu Lys Ala Gly Asp Glu Gly
              115              120              125

```

<210> 2085
 <211> 478
 <212> DNA
 <213> Homo sapiens

<400> 2085
 nnggatccca aagaccgcga tattgccatg gtgttccaaa actatgccct ctaccgcac
 60
 atgactgtcg ccgacaacat gggttttgcc ctcaaactgg cgaaagtgga taagaaagaa
 120
 atccggcgtc gcgtggagga agccgccgaa ctctcgacc tcaccgacta tctggaccgc
 180
 aaacccaagg cactctccgg tggccagcgg cagcgcgtcg ccatggggcg cgctattgtt
 240
 cgttcccccc gcgtcttctt gatggacgag cctctttcta acctggatgc gcgtctgcgt
 300
 gtccgcaccc gcgcccagat tgcggaactg cagcgccgcc tgggcaccac caccgtttat
 360
 gtcacccatg accaggtgga ggctatgacg atgggggatc gtgtggctgt tctctgtgcc
 420
 gggaaactgc agcaggtgga tactccacgt aatcttttcg accacccgc taacgcgt
 478

<210> 2086
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 2086
 Xaa Asp Pro Lys Asp Arg Asp Ile Ala Met Val Phe Gln Asn Tyr Ala
 1 5 10 15
 Leu Tyr Pro His Met Thr Val Ala Asp Asn Met Gly Phe Ala Leu Lys
 20 25 30
 Leu Ala Lys Val Asp Lys Lys Glu Ile Arg Arg Arg Val Glu Glu Ala
 35 40 45
 Ala Glu Leu Leu Asp Leu Thr Asp Tyr Leu Asp Arg Lys Pro Lys Ala
 50 55 60
 Leu Ser Gly Gly Gln Arg Gln Arg Val Ala Met Gly Arg Ala Ile Val
 65 70 75 80
 Arg Ser Pro Arg Val Phe Leu Met Asp Glu Pro Leu Ser Asn Leu Asp
 85 90 95
 Ala Arg Leu Arg Val Arg Thr Arg Ala Gln Ile Ala Glu Leu Gln Arg
 100 105 110
 Arg Leu Gly Thr Thr Thr Val Tyr Val Thr His Asp Gln Val Glu Ala
 115 120 125
 Met Thr Met Gly Asp Arg Val Ala Val Leu Cys Ala Gly Lys Leu Gln
 130 135 140
 Gln Val Asp Thr Pro Arg Asn Leu Phe Asp His Pro Ala Asn Ala
 145 150 155

<210> 2087
 <211> 731
 <212> DNA
 <213> Homo sapiens

<400> 2087
 gataattctc tacacggcat gagctgggga cgtacccccc ttgccaacgt cacctcacgg
 60

tcgtaccgtg gtgattagca gctagccgag gcgctagccg ccatataaga ttcccaaatt
 120
 aaaagaaaaa gcattgcgtc ggccaagaat tgctgtcgct gctgcaacgg ctactgcgct
 180
 ggctcgatca atcgcagcaa tcacccctc cccagggcag aagctaactc caataggcca
 240
 cgctcggtag ctcaagccgc tatcgccacg gatggaaagg ggataatcaa caaggactgc
 300
 cgtgatgcag tcatcaacga tgcaaagctg cgtgccgcga ttgccggtgc gttggttaag
 360
 gctggattta gttccgccga cgcgggtggt ctagcgccgc gtattgccag agaaatggca
 420
 aaagagggcg tcctcctcat caaccaccac aagctaaagg ctctcatcgg agcccagggtg
 480
 ggtctgctca ctgatgcgaa gatccagcgt gctgccgctg cagtggacct cggcatcaaa
 540
 gccactctag ctgcgacaat cattcccaac gcgctgcatt cagcggcatt caaggatgcg
 600
 gtggtegcaa atcttgtcgc cgcgggtctg acaagaagtt ggcaaaggct acggctgtcg
 660
 ccattgccgc aactgcgctc aatcccgtc tcgggccgat cgcaaagact gaggccatta
 720
 aggctgagat c
 731

<210> 2088

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2088

Met	Ala	Lys	Glu	Gly	Val	Leu	Leu	Ile	Asn	His	His	Lys	Leu	Lys	Ala
1				5					10					15	
Leu	Ile	Gly	Ala	Gln	Val	Gly	Leu	Leu	Thr	Asp	Ala	Lys	Ile	Gln	Arg
			20					25					30		
Ala	Ala	Ala	Ala	Val	Asp	Leu	Gly	Ile	Lys	Ala	Thr	Leu	Ala	Ala	Thr
			35				40					45			
Ile	Ile	Pro	Asn	Ala	Leu	His	Ser	Ala	Ala	Phe	Lys	Asp	Ala	Val	Val
			50			55					60				
Ala	Asn	Leu	Val	Ala	Ala	Gly	Leu	Thr	Arg	Ser	Trp	Gln	Arg	Leu	Arg
65					70				75					80	
Leu	Ser	Pro	Leu	Pro	Gln	Leu	Arg	Ser	Ile	Pro	Leu	Ser	Gly	Arg	Ser
				85				90						95	
Gln	Arg	Leu	Arg	Pro	Leu	Arg	Leu	Arg							
			100					105							

<210> 2089

<211> 315

<212> DNA

<213> Homo sapiens

<400> 2089

accggtgtgg accaggtcca gctgcgcgac gccatgtttt cctaccttcc ccaccacaag
 60

ctcggggaat tcgacatcga tctgttgctg gaccatcgcg attcccgta gcccatc
 120
 ttcgacaccg accacttcga ggggtacgag cgccccgcc tcgtgctgca cgaagtcacc
 180
 gatcaacttg gccaaagcgtt ccttgtattg gaaggcccag agccggctct cggctgggaa
 240
 tcgttggtgg cgtctctcac gagtcttgct gactctatgg ggatccgtct gaccggcatt
 300
 accgattcga tcccg
 315

<210> 2090

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2090

Thr	Gly	Val	Asp	Gln	Ala	Gln	Leu	Arg	Asp	Ala	Met	Phe	Ser	Tyr	Leu
1			5						10					15	
Pro	His	His	Lys	Leu	Gly	Glu	Phe	Asp	Ile	Asp	Leu	Leu	Leu	Asp	His
			20					25					30		
Arg	Asp	Ser	Arg	Gln	Pro	Ile	Ile	Phe	Asp	Thr	Asp	His	Phe	Glu	Gly
			35				40					45			
Tyr	Glu	Arg	Pro	Arg	Leu	Val	Leu	His	Glu	Val	Thr	Asp	Gln	Leu	Gly
	50					55				60					
Gln	Ala	Phe	Leu	Val	Leu	Glu	Gly	Pro	Glu	Pro	Ala	Leu	Gly	Trp	Glu
65					70					75				80	
Ser	Leu	Val	Ala	Ser	Leu	Thr	Ser	Leu	Val	Asp	Ser	Met	Gly	Ile	Arg
			85						90					95	
Leu	Thr	Gly	Ile	Thr	Asp	Ser	Ile	Pro							
			100					105							

<210> 2091

<211> 322

<212> DNA

<213> Homo sapiens

<400> 2091

actcttgccc attgtctctg tctctgcgtt tttctctctg tctctctgtg tctctgtctc
 60
 tgtgtccctg tccagttctg tnnctgtgtg tgcgcgcac tctctctgtg tctctgttng
 120
 agtctctgtc tcttttctct ctgtctctct ctgtgtctct gccattttg gtctctgctt
 180
 tctttctctct gtgtgtctct ccatttctgt ctctcttctt ctgtctctct ccatttctgt
 240
 ctctgtctct tttctctctg tgtgtctctt ttgtctctct gtttctctgc gtgtctctgt
 300
 ccatttctgt cccttcacgc gt
 322

<210> 2092

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2092

```

Thr Leu Val His Cys Leu Cys Leu Cys Val Phe Leu Ser Val Ser Leu
 1             5             10             15
Cys Leu Cys Leu Cys Val Pro Val Gln Phe Cys Xaa Cys Val Cys Ala
             20             25             30
His Leu Ser Leu Cys Leu Cys Xaa Ser Leu Cys Leu Phe Cys Leu Cys
             35             40             45
Leu Ser Leu Cys Leu Cys Pro Phe Trp Ser Leu Leu Ser Phe Leu Cys
             50             55             60
Val Ser Leu His Phe Cys Leu Ser Ser Ser Val Ser Leu His Phe Cys
65             70             75             80
Leu Cys Ser Phe Ser Leu Cys Val Ser Leu Leu Ser Leu Cys Phe Ser
             85             90             95
Ala Cys Leu Cys Pro Phe Leu Ser Leu His Ala
             100             105

```

<210> 2093

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2093

```

gccggcggtca tgcaaacgat caaggtggcg caatttcgcc tctgccatag tcgaaaaatg
60
tttgtggtgg cctaccgcgc agagaccag gagatggtgc tcgatgcgca taaccgcgcc
120
tttgcttct ttggggcggt accgcagcgg gttatctacg acaaccttaa aaccgcagtg
180
gatgcgatct tggtcggcaa ggatcgaatc ttcaaccggc gcttctctggc gttggctaatt
240
cattacctgt ttgaacctgt agcctgtacg cctgctgctg gctgggagaa gggccaagtt
300
gagaatcaag ttcgcaacat acgc
324

```

<210> 2094

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2094

```

Ala Gly Val Met Gln Thr Ile Lys Val Ala Gln Phe Arg Leu Cys His
 1             5             10             15
Ser Arg Lys Met Phe Val Val Ala Tyr Pro Arg Glu Thr Gln Glu Met
             20             25             30
Val Leu Asp Ala His Asn Arg Ala Phe Ala Phe Phe Gly Gly Val Pro
             35             40             45
Gln Arg Val Ile Tyr Asp Asn Leu Lys Thr Ala Val Asp Ala Ile Leu
             50             55             60
Val Gly Lys Asp Arg Ile Phe Asn Arg Arg Phe Leu Ala Leu Ala Asn
65             70             75             80
His Tyr Leu Phe Glu Pro Val Ala Cys Thr Pro Ala Ala Gly Trp Glu

```


85 90 95
 Lys Gly Gln Val Glu Asn Gln Val Arg Asn Ile Arg
 100 105

<210> 2095
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 2095
 cccgtcacag accaggaaga agcagacaat atgatcgctt ctttcgacac ttatgttcgc
 60
 accctgcccc ccgccgccaa tcttctgctt aaacaattcc atattgtgga tgttgccccg
 120
 cgcgtggtgg gcgtgggttc agtgggcacc cactccctgg tactgctact gtccggcccc
 180
 aatgatgaac ctcttgtgct gcaagtgaag gaagccctcc ccagtgtcct caccacccat
 240
 gggaaactgc cggatgcttt ttccgaactg tccgctgggg actcctccgg gctcctcccc
 300
 gataatcttg ataagcatat taaagccggc aatggctacc ggggtggtggc gtgccagcag
 360
 attctgcagg ccactcggg tccgctgctg ggggtggacgc gt
 402

<210> 2096
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2096
 Pro Val Thr Asp Gln Glu Glu Ala Asp Asn Met Ile Ala Ser Phe Asp
 1 5 10 15
 Thr Tyr Val Arg Thr Leu Pro Pro Ala Asn Leu Leu Leu Lys Gln
 20 25 30
 Phe His Ile Val Asp Val Ala Arg Arg Val Val Gly Val Gly Ser Val
 35 40 45
 Gly Thr His Ser Leu Val Leu Leu Leu Ser Gly Pro Asn Asp Glu Pro
 50 55 60
 Leu Val Leu Gln Val Lys Glu Ala Leu Pro Ser Val Leu Thr Thr His
 65 70 75 80
 Gly Lys Leu Pro Asp Ala Phe Ser Glu Leu Ser Ala Gly Asp Ser Ser
 85 90 95
 Gly Leu Leu Pro Asp Asn Leu Asp Lys His Ile Lys Ala Gly Asn Gly
 100 105 110
 Tyr Arg Val Val Ala Cys Gln Gln Ile Leu Gln Ala His Ser Asp Pro
 115 120 125
 Leu Leu Gly Trp Thr Arg
 130

<210> 2097
 <211> 641
 <212> DNA
 <213> Homo sapiens

<400> 2097

ncgtttctca cccgccctcc agcctcatca gcagctgtgg gctcaggccc cctccccgag
 60
 gcggagcagg cgtggccgca gagcagcggg gaggaggagc tgcagctcca gctggccctg
 120
 gccatgagca aggaggaggc cgaccaggta ctgggcgtgc agctggggct gtctgtccgc
 180
 caccgcctc caccctcac ttcaggctcc ctcccagcca ggcgtgggccc tggcctcac
 240
 tgctgctgct ccacatgctg tctctgtct cctccccagt cctgcctcat cctcacnccg
 300
 ccgtccctct gcgtgtcact ctctgcctgt cctcactggt tcagggaccc ccagcctctc
 360
 tttattcggc tctatctgac cctggctctg cctctgactc tgccctctggc cctccccgtc
 420
 atgccccctca cactctctct cccccagccc ccgtcctgcg gccccgagga cgacgcccag
 480
 ctccagctgg cccttagttt gagccgagaa gagcatgata aggtcagagc agcctccctg
 540
 tccctgcccc tgccaggggc tccctcaga ccagccccgt cgccccctcc taagtcaccc
 600
 ccacccatcc tgctggggccc gaagcccaca ggctcacgcg t
 641

<210> 2098

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2098

Xaa	Phe	Leu	Thr	Arg	Pro	Pro	Ala	Ser	Ser	Ala	Ala	Val	Gly	Ser	Gly
1				5					10					15	
Pro	Pro	Pro	Glu	Ala	Glu	Gln	Ala	Trp	Pro	Gln	Ser	Ser	Gly	Glu	Glu
			20					25					30		
Glu	Leu	Gln	Leu	Gln	Leu	Ala	Leu	Ala	Met	Ser	Lys	Glu	Glu	Ala	Asp
		35				40						45			
Gln	Val	Leu	Gly	Val	Gln	Leu	Gly	Leu	Ser	Val	Arg	His	Pro	Pro	Pro
	50				55					60					
Arg	Leu	Thr	Ser	Gly	Ser	Leu	Pro	Ala	Arg	Arg	Gly	Pro	Gly	Pro	His
65				70				75						80	
Cys	Arg	Cys	Ser	Thr	Cys	Cys	His	Ser	Ser	Pro	Pro	Gln	Ser	Cys	Leu
			85					90					95		
Ile	Leu	Thr	Pro	Pro	Ser	Leu	Cys	Val	Ser	Leu	Ser	Ala	Cys	Pro	His
		100					105					110			
Trp	Phe	Arg	Asp	Pro	Gln	Pro	Leu	Phe	Ile	Arg	Leu	Tyr	Leu	Thr	Leu
	115				120						125				
Ala	Leu	Pro	Leu	Thr	Leu	Pro	Leu	Ala	Pro	Pro	Val	Met	Pro	Leu	Thr
	130				135						140				
Leu	Ser	Leu	Pro	Gln	Pro	Pro	Ser	Cys	Gly	Pro	Glu	Asp	Asp	Ala	Gln
145				150				155						160	
Leu	Gln	Leu	Ala	Leu	Ser	Leu	Ser	Arg	Glu	Glu	His	Asp	Lys	Val	Arg
			165				170					175			
Ala	Ala	Ser	Leu	Ser	Leu	Pro	Leu	Pro	Gly	Ala	Pro	Leu	Arg	Pro	Ala

```

                180                185                190
Pro Ser Pro Leu Pro Lys Ser Pro Pro Thr Ile Leu Leu Gly Pro Lys
      195                200                205
Pro Thr Gly Ser Arg
      210

```

<210> 2099

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2099

```

acgcgtgtgc cctgtcccct gccagacatg gacagcacct gcccacaggg gtgctcagtg
60
gaggcagtgc ccaggggtgc tgtgcccattg cgtgtaccct gtccctctgcc agacgcggac
120
agcacctgcc cacgggggtgc tcagtggagg cagtgccag ggctgctgtg cccacgtgtg
180
tgccctcaga cateccctccc cagacacttg ctgcatgacc caggaggtgg caggcagtgg
240
cagtattctg ttcaggtgag ctcagaggtg gcaggtgcct ggctgcgggc ctgcctcact
300
ccgacagcct ctgcctccag tccactggct catccacat ggctga
347

```

<210> 2100

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2100

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Met Asp Ser Thr Cys Pro Gln Gly Cys Ser Val Glu Ala Val Pro Arg
 1      5      10      15
Ala Ala Val Pro Met Arg Val Pro Cys Pro Leu Pro Asp Ala Asp Ser
      20      25      30
Thr Cys Pro Arg Gly Ala Gln Trp Arg Gln Cys Pro Gly Leu Leu Cys
      35      40      45
Pro Arg Val Cys Pro Gln Thr Ser Leu Pro Arg His Leu Leu His Asp
      50      55      60
Pro Gly Gly Gly Arg Gln Trp Gln Tyr Ser Val Gln Val Ser Ser Glu
      65      70      75      80
Val Ala Gly Ala Trp Leu Arg Pro Cys Leu Thr Pro Thr Ala Ser Ala
      85      90      95
Ser Ser Pro Leu Ala His Pro Thr Trp Pro
      100      105

```

<210> 2101

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2101

```

ctctctccga ccgcgttgac ggtccagccg gtccgcacgc cgtcacgga atcgccatca
60

```

acgttttcgat ggggcgtgac gaattgcccc tgccgacggc gacctctctg gctctgtgtg
 120
 ggttgaacca cgacaagaat gagttgctgg ccagccttct catccacctt gacgagctat
 180
 taacagtgtg gttggagacc ggaacgggtgc gggatcagta tgtggcccg tgtgacacca
 240
 ttggtactcc ggtccgtctg accttcgacc cagaaatcgt ggggtggtggt gagggggcca
 300
 ttgagggcat cgggtgctgac gttgacgttg atggcgctat cgtggtggaa acttctgacg
 360
 ggcgtgcgag tttcaacgct gctgacgttc atcatttgcg aaccaggtga gttccgctac
 420
 ggcgtcctga gcgttccac catctagact gctgactatg acgaccaca ttttggccct
 480
 tggtggtggc gggttctcga tgtcgaaccg cggtgagcct accgctctcg accgtcacat
 540
 ccctgacct
 549

<210> 2102

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2102

Met	Gly	Arg	Asp	Glu	Leu	Pro	Leu	Pro	Thr	Ala	Thr	Ser	Leu	Ala	Leu
1				5					10					15	
Cys	Gly	Leu	Asn	His	Asp	Lys	Asn	Glu	Leu	Leu	Ala	Ser	Leu	Leu	Ile
			20					25					30		
His	Leu	Asp	Glu	Leu	Leu	Thr	Val	Trp	Leu	Glu	Thr	Gly	Thr	Val	Arg
		35				40						45			
Asp	Gln	Tyr	Val	Ala	Arg	Cys	Asp	Thr	Ile	Gly	Thr	Pro	Val	Arg	Leu
	50					55					60				
Thr	Phe	Asp	Pro	Glu	Ile	Val	Gly	Gly	Gly	Glu	Gly	Ala	Ile	Glu	Gly
65					70					75				80	
Ile	Gly	Val	Asp	Val	Asp	Val	Asp	Gly	Ala	Ile	Val	Val	Glu	Thr	Ser
			85					90						95	
Asp	Gly	Arg	Arg	Ser	Phe	Asn	Ala	Ala	Asp	Val	His	His	Leu	Arg	Thr
			100					105						110	

Arg

<210> 2103

<211> 459

<212> DNA

<213> Homo sapiens

<400> 2103

nnacgcgtga cttatacacc gggacgcaat gcgacggcaa cggcagagca cactatcgcc
 60
 atgattatgg cggcagtgcg acagatcccc gccaccatg agttactcgc ttcaggggtt
 120
 tgggaggggg acgcatatcg gtacgaccag gttggtatgg aaatcaaagg gaatgacgtc
 180

ggtatcgtcg gatgcggagc ggtcgggtgc cgggttgccg ctgtgatggc ggccatgggt
 240
 gcgaccgtgc gtgtcttcga cccgtggggc actcctgatt cttttccagc tggcgtgatg
 300
 gcatgtgatg atctcgatga ggttctgagg ctcagccgca tcttcactct ccacgctcgt
 360
 gccaacgagg acaaccgtca catgattggc gttgaacaat tagctgagat gcctgatggc
 420
 tccgtcctcg tcaactgtgc ccgtggctcg ctggctcgac
 459

<210> 2104

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2104

Xaa	Arg	Val	Thr	Tyr	Thr	Pro	Gly	Arg	Asn	Ala	Thr	Ala	Thr	Ala	Glu
1				5					10					15	
His	Thr	Ile	Ala	Met	Ile	Met	Ala	Ala	Val	Arg	Gln	Ile	Pro	Ala	His
			20					25					30		
His	Glu	Leu	Leu	Ala	Ser	Gly	Val	Trp	Glu	Gly	Asp	Ala	Tyr	Arg	Tyr
		35					40				45				
Asp	Gln	Val	Gly	Met	Glu	Ile	Lys	Gly	Asn	Asp	Val	Gly	Ile	Val	Gly
		50				55					60				
Cys	Gly	Ala	Val	Gly	Cys	Arg	Val	Ala	Ala	Val	Met	Ala	Ala	Met	Gly
65					70					75				80	
Ala	Thr	Val	Arg	Val	Phe	Asp	Pro	Trp	Ala	Thr	Pro	Asp	Ser	Phe	Pro
			85						90					95	
Ala	Gly	Val	Met	Ala	Cys	Asp	Asp	Leu	Asp	Glu	Val	Leu	Arg	Leu	Ser
			100					105					110		
Arg	Ile	Leu	Thr	Leu	His	Ala	Arg	Ala	Asn	Glu	Asp	Asn	Arg	His	Met
		115				120						125			
Ile	Gly	Val	Glu	Gln	Leu	Ala	Glu	Met	Pro	Asp	Gly	Ser	Val	Leu	Val
	130				135						140				
Asn	Cys	Ala	Arg	Gly	Ser	Leu	Val	Asp							
145					150										

<210> 2105

<211> 4057

<212> DNA

<213> Homo sapiens

<400> 2105

nnggaaaagc tccgtctagg gggcccccag catgcctgga agtcttgtgc atctgcctag
 60
 agctgaagct ttgggtctgt cctggetttg ccaggcagcc agttttattt cctttgttca
 120
 cccctatatg gctccagtcg gttttggggg gggcagctaa gtgggggagg gggaacacaa
 180
 aagtttgggc aaaacattaa cctgacaaag cttgattccg gaaaaaatc cctcaagagc
 240
 gcaaggccag cttagccaac tggcagctga gtggaaaggc tcagtcctct cgggcagctc
 300

cggtggcacc tagaggggag aggggtgcagg ctttgaagcc agaaagacat ggatgcaagt
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<210> 2106

<211> 240

<212> PRT

<213> Homo sapiens

<400> 2106

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			20					25					30		
Gln	Ser	Glu	Leu	Thr	Asn	Met	Asp	Leu	Ala	Ala	Leu	Phe	Ser	Asp	Thr
			35				40					45			
Pro	Ala	Asn	Ala	Ser	Gly	Ser	Ala	Gly	Gly	Ser	Asp	Glu	Ala	Leu	Asn
			50				55				60				
Ser	Gly	Ile	Leu	Thr	Ile	Asp	Val	Thr	Ser	Val	Ser	Ser	Ser	Leu	Gly
65					70					75				80	
Gly	Asn	Leu	Pro	Ala	Asn	Asn	Ser	Ser	Leu	Gly	Pro	Met	Glu	Pro	Leu
				85					90					95	
Val	Leu	Val	Ala	His	Ser	Asp	Ile	Pro	Pro	Ser	Leu	Asp	Ser	Pro	Leu
			100					105					110		
Val	Leu	Gly	Thr	Ala	Ala	Thr	Val	Leu	Gln	Gln	Gly	Ser	Phe	Ser	Val
			115				120					125			
Asp	Asp	Val	Gln	Thr	Val	Ser	Ala	Gly	Ala	Leu	Gly	Cys	Leu	Val	Ala
			130				135				140				
Leu	Pro	Met	Lys	Asn	Leu	Ser	Asp	Asp	Pro	Leu	Ala	Leu	Thr	Ser	Asn
145					150					155				160	
Ser	Asn	Leu	Ala	Ala	His	Ile	Thr	Thr	Pro	Thr	Ser	Ser	Ser	Thr	Pro
				165					170					175	
Arg	Glu	Asn	Ala	Ser	Val	Pro	Glu	Leu	Leu	Ala	Pro	Ile	Lys	Val	Glu
			180					185					190		
Pro	Asp	Ser	Pro	Ser	Arg	Pro	Gly	Ala	Val	Gly	Gln	Gln	Glu	Gly	Ser
			195				200					205			
His	Gly	Leu	Pro	Gln	Ser	Thr	Leu	Pro	Ser	Pro	Ala	Glu	Gln	His	Gly
			210				215				220				
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<211> 305
<212> DNA
<213> Homo sapiens

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<211> 92
<212> PRT
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35 40 45
Ile Ala Pro Ala Ser Leu Gln Ile Thr Ser Ser Cys Ser Gly Glu Pro
50 55 60
Leu Asp Leu Asp Ser Lys Asp Val Ser Arg Pro Asp Ser Gln Gly Arg
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<210> 2109
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<212> DNA
<213> Homo sapiens

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240

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<210> 2110

<211> 233

<212> PRT

<213> Homo sapiens

<400> 2110

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			20					25				30				
Gln	Ala	Lys	Ala	Thr	Lys	Arg	Lys	Tyr	Gln	Ala	Ser	Ser	Glu	Ala	Pro	
		35					40					45				
Pro	Ala	Lys	Arg	Arg	Asn	Glu	Thr	Ser	Phe	Leu	Pro	Ala	Lys	Lys	Thr	
		50				55					60					
Ser	Val	Lys	Glu	Thr	Gln	Arg	Thr	Phe	Lys	Gly	Asn	Ala	Gln	Lys	Met	
65					70					75					80	
Phe	Ser	Pro	Lys	Lys	His	Ser	Val	Ser	Thr	Ser	Asp	Arg	Asn	Gln	Glu	
				85					90					95		
Glu	Arg	Gln	Cys	Ile	Lys	Thr	Ser	Ser	Leu	Phe	Lys	Asn	Asn	Pro	Asp	
			100					105					110			
Ile	Pro	Glu	Leu	His	Arg	Pro	Val	Val	Lys	Gln	Val	Gln	Glu	Lys	Val	
		115					120					125				
Phe	Thr	Ser	Ala	Ala	Phe	His	Glu	Leu	Gly	Leu	His	Pro	His	Leu	Ile	
		130				135						140				
Ser	Thr	Ile	Asn	Thr	Val	Leu	Lys	Met	Ser	Ser	Met	Thr	Ser	Val	Gln	
145					150					155					160	
Lys	Gln	Ser	Ile	Pro	Val	Leu	Leu	Glu	Gly	Arg	Asp	Ala	Leu	Val	Arg	
				165					170					175		
Ser	Gln	Thr	Gly	Ser	Gly	Lys	Ile	Leu	Ala	Tyr	Cys	Ile	Pro	Val	Val	
			180					185					190			
Gln	Ser	Leu	Gln	Ala	Met	Glu	Ser	Lys	Ile	Gln	Arg	Ser	Asp	Gly	Pro	
		195					200						205			
Tyr	Ala	Leu	Val	Leu	Val	Pro	Thr	Arg	Glu	Val	Ser	Arg	Leu	Pro	Phe	
		210				215						220				
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<210> 2111
 <211> 339
 <212> DNA
 <213> Homo sapiens

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<210> 2112
 <211> 113
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Phe Met Pro Ile Lys Leu Val Pro Lys Gln Phe Glu Gly Leu Val
 50 55 60
 Glu Arg Val Arg Ser Ala Leu Glu Arg Leu Arg Ala Gln Glu Arg Ala
 65 70 75 80
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 85 90 95
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<210> 2113
 <211> 2329
 <212> DNA
 <213> Homo sapiens

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<210> 2114

<211> 758

<212> PRT

<213> Homo sapiens

<400> 2114

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			20					25					30		
Gly	Asn	Pro	Leu	Asn	Pro	Lys	Ser	Lys	Gly	Lys	Leu	Thr	Leu	Asp	Ser
		35					40					45			
Ser	Phe	Asn	Ile	Ala	Ser	Pro	Ala	Ser	Gln	Ala	Trp	Ile	Leu	His	Phe
	50					55					60				
Cys	Gln	Lys	Leu	Arg	Asn	Gln	Thr	Phe	Phe	Tyr	Gln	Thr	Asp	Glu	Gln
65				70						75				80	
Asp	Phe	Thr	Ser	Cys	Phe	Ile	Glu	Thr	Phe	Lys	Gln	Trp	Met	Glu	Asn
			85					90					95		
Gln	Asp	Cys	Asp	Glu	Pro	Ala	Leu	Tyr	Pro	Cys	Cys	Ser	His	Trp	Ser
			100					105					110		
Phe	Pro	Tyr	Lys	Gln	Glu	Ile	Phe	Glu	Leu	Cys	Ile	Lys	Arg	Ala	Ile
			115					120					125		
Met	Glu	Leu	Glu	Arg	Ser	Thr	Gly	Tyr	His	Leu	Asp	Ser	Lys	Thr	Pro
			130				135				140				
Gly	Pro	Arg	Phe	Asp	Ile	Asn	Asp	Thr	Ile	Arg	Ala	Val	Val	Leu	Glu
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Phe	Gln	Ser	Thr	Tyr	Leu	Phe	Thr	Leu	Ala	Tyr	Glu	Lys	Met	His	Gln
			165					170						175	
Phe	Tyr	Lys	Glu	Val	Asp	Ser	Trp	Ile	Ser	Ser	Glu	Leu	Ser	Ser	Ala
			180					185					190		
Pro	Glu	Gly	Leu	Ser	Asn	Gly	Trp	Phe	Val	Ser	Asn	Leu	Glu	Phe	Tyr
			195				200					205			
Asp	Leu	Gln	Asp	Ser	Leu	Ser	Asp	Gly	Thr	Leu	Ile	Ala	Met	Gly	Leu
			210				215					220			
Ser	Val	Ala	Val	Ala	Phe	Ser	Val	Met	Leu	Leu	Thr	Thr	Trp	Asn	Ile

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          260          265          270
Ser Val Thr Ile Ser Val Ala Val Gly Leu Ser Val Asp Phe Ala Val
          275          280          285
His Tyr Gly Val Ala Tyr Arg Leu Ala Pro Asp Pro Asp Arg Glu Gly
          290          295          300
Lys Val Ile Phe Ser Leu Ser Arg Val Gly Ser Ala Met Ala Met Ala
305          310          315          320
Ala Leu Thr Thr Phe Val Ala Gly Ala Met Met Ile Pro Ser Thr Val
          325          330          335
Leu Ala Tyr Thr Gln Leu Gly Thr Phe Met Met Leu Ile Met Cys Ile
          340          345          350
Ser Trp Ala Phe Ala Thr Phe Phe Phe Gln Cys Met Cys Arg Cys Leu
          355          360          365
Gly Pro Gln Gly Thr Cys Gly Gln Ile Pro Leu Pro Lys Lys Leu Gln
          370          375          380
Cys Ser Ala Phe Ser His Ala Leu Ser Thr Ser Pro Ser Asp Lys Gly
385          390          395          400
Gln Ser Lys Thr His Thr Ile Asn Ala Tyr His Leu Asp Pro Arg Gly
          405          410          415
Pro Lys Ser Glu Leu Glu His Glu Phe Tyr Glu Leu Glu Pro Leu Ala
          420          425          430
Ser His Ser Cys Thr Ala Pro Glu Lys Thr Thr Tyr Glu Glu Thr His
          435          440          445
Ile Cys Ser Glu Phe Phe Asn Ser Gln Ala Lys Asn Leu Gly Met Pro
          450          455          460
Val His Ala Ala Tyr Asn Ser Glu Leu Ser Lys Ser Thr Glu Ser Asp
465          470          475          480
Thr Gly Ser Ala Leu Leu Gln Pro Pro Leu Glu Gln His Thr Val Cys
          485          490          495
His Phe Phe Ser Leu Asn Gln Arg Cys Ser Cys Pro Asp Ala Tyr Lys
          500          505          510
His Leu Asn Tyr Gly Pro His Ser Cys Gln Gln Met Gly Asp Cys Leu
          515          520          525
Cys His Gln Cys Ser Pro Thr Ser Ser Phe Val Gln Ile Gln Asn
          530          535          540
Gly Val Ala Pro Leu Lys Ala Thr His Gln Ala Val Glu Gly Phe Val
545          550          555          560
His Pro Ile Thr His Ile His His Cys Pro Cys Leu Gln Gly Arg Val
          565          570          575
Lys Pro Ala Gly Met Gln Asn Ser Leu Pro Arg Asn Phe Phe Leu His
          580          585          590
Pro Val Gln His Ile Gln Ala Gln Glu Lys Ile Gly Lys Thr Asn Val
          595          600          605
His Ser Leu Gln Arg Ser Ile Glu Glu His Leu Pro Lys Met Ala Glu
          610          615          620
Pro Ser Ser Phe Val Cys Arg Ser Thr Gly Ser Leu Leu Lys Thr Cys
625          630          635          640
Cys Asp Pro Glu Asn Lys Gln Arg Glu Leu Cys Lys Asn Arg Asp Val
          645          650          655
Ser Asn Leu Glu Ser Ser Gly Gly Thr Glu Asn Lys Ala Gly Gly Lys

```

660						665						670					
Val	Glu	Leu	Ser	Leu	Ser	Gln	Thr	Asp	Ala	Ser	Val	Asn	Ser	Glu	His		
675						680						685					
Phe	Asn	Gln	Asn	Glu	Pro	Lys	Val	Leu	Phe	Asn	His	Leu	Met	Gly	Glu		
690						695						700					
Ala	Gly	Cys	Arg	Ser	Cys	Pro	Asn	Asn	Ser	Gln	Ser	Cys	Gly	Arg	Ile		
705						710						715					
Val	Arg	Val	Lys	Cys	Asn	Ser	Val	Asp	Cys	Gln	Met	Pro	Asn	Met	Glu		
725						730						735					
Ala	Asn	Val	Pro	Ala	Val	Leu	Thr	His	Ser	Glu	Leu	Ser	Gly	Glu	Ser		
740						745						750					
Leu	Leu	Ile	Lys	Thr	Leu												
755																	

```
<210> 2115
<211> 461
<212> DNA
<213> Homo sapiens
```

```
<400> 2115
acgcgtctctt ggcctgggag cgggctcccc cgacacgccca ccttccctgc cagatgggtgc
60
ttctgggtat tccagaatct ggaatggggg atgcctatcc cctcctgag cccacctgct
120
ggctcttgggt ccttggagcc caccaagtcc acaaccacct gctctgaata gaaagctgac
180
attgaaccga acagccgcgt cggaggggga tatctgtgga gagctgtgac tgggagccgg
240
tgtgtgcctt tctgtggtca tttctcgagt cctctgccgg ctgctgccag gtgaaggcat
300
ctccatgcc agccggtggg cagctggggc gggtggaact ccagcttctg cccgacgggg
360
ttcagatgac cgagatccta cgggattgcc aatgtgtggg gacggggggc tttcaggggc
420
gggaaaacat gtcccatcc gtgggaagtg gagccacgtg g
461
```

```
<210> 2116
<211> 146
<212> PRT
<213> Homo sapiens
```

```

<400> 2116
Met Gly Thr Cys Phe Pro Ala Pro Glu Ser Pro Pro Ser Pro His Ile
  1           5           10           15
Gly Asn Pro Val Gly Ser Arg Ser Ser Glu Pro Arg Arg Ala Glu Ala
          20          25          30
Gly Gly Pro Pro Ala Pro Ala Ala His Arg Leu Gly Met Glu Met Pro
          35          40          45
Ser Pro Gly Ser Ser Arg Gln Arg Thr Arg Glu Met Thr Thr Glu Arg
          50          55          60
His Thr Pro Ala Pro Ser His Ser Ser Pro Gln Ile Ser Pro Ser Asp
 65          70          75          80
Ala Ala Val Arg Phe Asn Val Ser Phe Leu Phe Arg Ala Gly Gly Cys

```

```

      85              90              95
Gly Leu Gly Gly Leu Gln Gly Pro Lys Thr Ser Arg Trp Ala Gln Glu
      100              105              110
Gly Asp Arg His Pro Pro Phe Gln Ile Leu Glu Tyr Pro Glu Ala Pro
      115              120              125
Ser Gly Arg Glu Gly Gly Val Ser Gly Glu Pro Ala Pro Arg Pro Glu
      130              135              140
Thr Arg
145

```

<210> 2117
 <211> 360
 <212> DNA
 <213> Homo sapiens

```

<400> 2117
nnacgcggttg gggagacgac ggtgaccttc ccagcaagct catcgcagga tgaacaatc
60
cgcgccagcg ttaagacctt ctcgcgggct gtcaccgccg atctggagaa gtgtggaccg
120
atcaggtgac actcgcggta gactgaatag atgcctgagt ctgaagacac tgtgtggctg
180
acccaagagg ccttcgataa gctcacccag gagctggagt acctcaaagg cgaaggccgc
240
accgtcattg ccaacaagat tgccgacgcc cgttcggaag gcgacctttc tgagaacggc
300
ggctaccatg ccgcccgtag ggagcagggg caggccgagg cccgcacccg tcaactcgag
360

```

<210> 2118
 <211> 70
 <212> PRT
 <213> Homo sapiens

```

<400> 2118
Met Pro Glu Ser Glu Asp Thr Val Trp Leu Thr Gln Glu Ala Phe Asp
1      5      10      15
Lys Leu Thr Gln Glu Leu Glu Tyr Leu Lys Gly Glu Gly Arg Thr Val
      20      25      30
Ile Ala Asn Lys Ile Ala Asp Ala Arg Ser Glu Gly Asp Leu Ser Glu
      35      40      45
Asn Gly Gly Tyr His Ala Ala Arg Glu Glu Gln Gly Gln Ala Glu Ala
      50      55      60
Arg Ile Arg Gln Leu Glu
65      70

```

<210> 2119
 <211> 465
 <212> DNA
 <213> Homo sapiens

```

<400> 2119
naccgctgaa gggcgcgtgt cggcctctca ctggcgcagc ctgcactgcc gctgccgcct
60

```


cgccccgccc ttgccttggc gttgtctctg gcactgtggc ggactgacca cggcccgggc
 120
 atgggctgca agggagacgc gagcggagtt tgctataaaa tgggagttct ggttgtactc
 180
 actgttctgt ggctgttctc ctacagtaaag gccgactcaa aagccattac aacctctctt
 240
 acaacaaaat ggttttccac tccattgttg ttagaagcca gtgagttttt agcagaagac
 300
 agtcaagaga aattttggaa tttttagaa gccagtcaaa atattggatc atcagatcat
 360
 gacggtagcg attattccta ctatcatgca atattggagg ctgcatttca gtttctgtca
 420
 cccctccagc agaatttgtt taaattttgt ctgtcccttc acgcg
 465

<210> 2120

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2120

Met	Gly	Cys	Lys	Gly	Asp	Ala	Ser	Gly	Val	Cys	Tyr	Lys	Met	Gly	Val
1				5					10					15	
Leu	Val	Val	Leu	Thr	Val	Leu	Trp	Leu	Phe	Ser	Ser	Val	Lys	Ala	Asp
			20					25					30		
Ser	Lys	Ala	Ile	Thr	Thr	Ser	Leu	Thr	Thr	Lys	Trp	Phe	Ser	Thr	Pro
		35					40					45			
Leu	Leu	Leu	Glu	Ala	Ser	Glu	Phe	Leu	Ala	Glu	Asp	Ser	Gln	Glu	Lys
		50				55					60				
Phe	Trp	Asn	Phe	Val	Glu	Ala	Ser	Gln	Asn	Ile	Gly	Ser	Ser	Asp	His
65				70					75					80	
Asp	Gly	Thr	Asp	Tyr	Ser	Tyr	Tyr	His	Ala	Ile	Leu	Glu	Ala	Ala	Phe
			85					90						95	
Gln	Phe	Leu	Ser	Pro	Leu	Gln	Gln	Asn	Leu	Phe	Lys	Phe	Cys	Leu	Ser
			100					105						110	
Leu	His	Ala													
															115

<210> 2121

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2121

ccggacaagg tcaatggaat gaaaacctcc cggccgacag acaatagtat aaatgttaca
 60
 tgtggtcctc cttatgaaac taatggccct aaaacctttt acatttttgt agtcagaagt
 120
 ggaggttctt ttgttataaa atacaacaag acaaactgtc agttttatgt agataatctc
 180
 tactattcaa ctgactatga gtttctggtc tcttttcaca atggagtgtc cgagggagat
 240
 tcagttataa gaaatgagtc aacaaatttt aatgctaaag ccctgattat attcctggtg
 300

tttctgatta ttgtgacatc aatagccttg cttggt
336

<210> 2122
<211> 112
<212> PRT
<213> Homo sapiens

<400> 2122
Pro Asp Lys Val Asn Gly Met Lys Thr Ser Arg Pro Thr Asp Asn Ser
1 5 10 15
Ile Asn Val Thr Cys Gly Pro Pro Tyr Glu Thr Asn Gly Pro Lys Thr
20 25 30
Phe Tyr Ile Leu Val Val Arg Ser Gly Gly Ser Phe Val Thr Lys Tyr
35 40 45
Asn Lys Thr Asn Cys Gln Phe Tyr Val Asp Asn Leu Tyr Tyr Ser Thr
50 55 60
Asp Tyr Glu Phe Leu Val Ser Phe His Asn Gly Val Tyr Glu Gly Asp
65 70 75 80
Ser Val Ile Arg Asn Glu Ser Thr Asn Phe Asn Ala Lys Ala Leu Ile
85 90 95
Ile Phe Leu Val Phe Leu Ile Ile Val Thr Ser Ile Ala Leu Leu Val
100 105 110

<210> 2123
<211> 426
<212> DNA
<213> Homo sapiens

<400> 2123
aactgggccc agttcggcaa cctgcacccg ttcgccccgg ccgagcaaag cgctgggttat
60
cagcaactga ccgacgaact ggaagcgatg ctctgcgccg ccacagggtta tgacgcgatc
120
tccctgcagc cgaacgctgg ctcccagggc gagtacgccg gtctgctggc gatccgcgct
180
taccaccaga gccgtggcga tgagcgctgc gacatctgcc tgattccgtc ctctgcccac
240
ggcaccaacc cggcaaccgc caacatggcc ggcatgcgcg tggtcgtgac cgcttgcgac
300
gcccggggca acgtcgacat cgaagacctg cgcgccaaagg ctatcgagca ccgcgaacac
360
ctcggggcgc tgatgatcac ctaccgctcg acccacggcg tggtcgaaga aggcacccgc
420
gagatc
426

<210> 2124
<211> 142
<212> PRT
<213> Homo sapiens

<400> 2124
Asn Trp Ala Glu Phe Gly Asn Leu His Pro Phe Ala Pro Ala Glu Gln

```

      1           5           10           15
Ser Ala Gly Tyr Gln Gln Leu Thr Asp Glu Leu Glu Ala Met Leu Cys
      20           25           30
Ala Ala Thr Gly Tyr Asp Ala Ile Ser Leu Gln Pro Asn Ala Gly Ser
      35           40           45
Gln Gly Glu Tyr Ala Gly Leu Leu Ala Ile Arg Ala Tyr His Gln Ser
      50           55           60
Arg Gly Asp Glu Arg Arg Asp Ile Cys Leu Ile Pro Ser Ser Ala His
      65           70           75           80
Gly Thr Asn Pro Ala Thr Ala Asn Met Ala Gly Met Arg Val Val Val
      85           90           95
Thr Ala Cys Asp Ala Arg Gly Asn Val Asp Ile Glu Asp Leu Arg Ala
      100          105          110
Lys Ala Ile Glu His Arg Glu His Leu Ala Ala Leu Met Ile Thr Tyr
      115          120          125
Pro Ser Thr His Gly Val Phe Glu Glu Gly Ile Arg Glu Ile
      130          135          140

```

<210> 2125

<211> 285

<212> DNA

<213> Homo sapiens

<400> 2125

```

ngtatggcat ctgctgcttc aagttttgtg gtgacaccaa atgtcacttc taacacaacc
60
acagtcaagc ccaatatggt tatgttacct attcaaaaca caagagggtc aagattgggt
120
ctaaaggcgg ctgaagacgc ggcaccaccg gctgtcaccg ttgaagcggc caaggaagag
180
aagccgaagc caccaccaat tggacctaag agaggagcca aggtgagaat tcttaggaag
240
gagtcatact ggttcaaagg agtgggatca gttgtgactg ttgat
285

```

<210> 2126

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2126

```

Xaa Met Ala Ser Ala Ala Ser Ser Phe Val Val Thr Pro Asn Val Thr
      1           5           10           15
Ser Asn Thr Thr Thr Val Lys Pro Asn Met Val Met Leu Pro Ile Gln
      20           25           30
Asn Thr Arg Gly Ser Arg Leu Val Leu Lys Ala Ala Glu Asp Ala Ala
      35           40           45
Pro Pro Ala Val Thr Val Glu Ala Ala Lys Glu Glu Lys Pro Lys Pro
      50           55           60
Pro Pro Ile Gly Pro Lys Arg Gly Ala Lys Val Arg Ile Leu Arg Lys
      65           70           75           80
Glu Ser Tyr Trp Phe Lys Gly Val Gly Ser Val Val Thr Val Asp
      85           90           95

```

<210> 2127
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 2127
 atggcagcca agatgcttgc attgttcgct ctcctagctc tttgtgcaag cgccactagt
 60
 gcgacgcata ttccaggggca cttgtcacca gtcatgccat tgggtaccat gaacccatgc
 120
 atgcagtact gcatgatgca acaggggctt gccagcttga tggcgtgtcc gtccttgatg
 180
 ctgcagcaac tgttggcctt accgcttcag acgatgccag tgatgatgcc acagatgatg
 240
 acgcctaaca tgatgtcacc attgatgatg ccgagcatga tgtcaccaat ggtcttgccg
 300
 agcatgatgt cgcaaatgat gatgccacaa tgtcactgcg acgccgtctc gcagattatg
 360
 ctgcaacagc agttaccatt catgttcaac ccaatggcca tgacgattcc acccatgttc
 420
 ttacagcaac cctttgttgg tgctgcattc taga
 454

<210> 2128
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 2128
 Met Ala Ala Lys Met Leu Ala Leu Phe Ala Leu Leu Ala Leu Cys Ala
 1 5 10 15
 Ser Ala Thr Ser Ala Thr His Ile Pro Gly His Leu Ser Pro Val Met
 20 25 30
 Pro Leu Gly Thr Met Asn Pro Cys Met Gln Tyr Cys Met Met Gln Gln
 35 40 45
 Gly Leu Ala Ser Leu Met Ala Cys Pro Ser Leu Met Leu Gln Gln Leu
 50 55 60
 Leu Ala Leu Pro Leu Gln Thr Met Pro Val Met Met Pro Gln Met Met
 65 70 75 80
 Thr Pro Asn Met Met Ser Pro Leu Met Met Pro Ser Met Met Ser Pro
 85 90 95
 Met Val Leu Pro Ser Met Met Ser Gln Met Met Met Pro Gln Cys His
 100 105 110
 Cys Asp Ala Val Ser Gln Ile Met Leu Gln Gln Gln Leu Pro Phe Met
 115 120 125
 Phe Asn Pro Met Ala Met Thr Ile Pro Pro Met Phe Leu Gln Gln Pro
 130 135 140
 Phe Val Gly Ala Ala Phe
 145 150

<210> 2129
 <211> 354
 <212> DNA
 <213> Homo sapiens

```
<400> 2129
acgcgtgact tggatgaacaa acccatatcc atcacccccc tgggtgttga tacggaaata
60
ctcacgcccc ttgacaagcg gcgtgatgcg aacggcggtg acgggggtgg ggcgcatcggg
120
actatcaagg ctctccactc caaatatggg atcgggtgaac tcatccgtgc cttcagtcgg
180
gtccatgatg aacggcctaa taccgtcctt cgtatctggg ggggcggccc agacgagaat
240
cccctcaagg tcttggtcgc cgtcttgtc ccggacgggt cgggtggagt tcgcgggtgcc
300
attgatcatt ctgaggtcag aaatgccttg ggtagtattg acatctttgc cgcc
354
```

```
<210> 2130
<211> 118
<212> PRT
<213> Homo sapiens
```

```

<400> 2130
Thr Arg Asp Leu Val Asn Lys Pro Ile Ser Ile Thr Pro Phe Gly Val
 1          5          10          15
Asp Thr Glu Ile Leu Thr Pro Phe Asp Lys Arg Arg Asp Ala Asn Gly
          20          25          30
Gly Asp Gly Val Val Arg Ile Gly Thr Ile Lys Ala Leu His Ser Lys
          35          40          45
Tyr Gly Ile Gly Glu Leu Ile Arg Ala Phe Ser Arg Val His Asp Glu
          50          55          60
Arg Pro Asn Thr Val Leu Arg Ile Trp Gly Gly Gly Pro Asp Glu Asn
65          70          75          80
Pro Leu Lys Val Leu Ala Arg Arg Leu Val Pro Asp Gly Ser Val Glu
          85          90          95
Phe Arg Gly Ala Ile Asp His Ser Glu Val Arg Asn Ala Leu Gly Ser
          100          105          110
Leu Asp Ile Phe Ala Ala
          115

```

```
<210> 2131
<211> 324
<212> DNA
<213> Homo sapiens
```

```
<400> 2131
gcatcgcggc catttggttat gtgtgcctat tccattgggtt atgtggaagg ttgggatcag
60
ccagacagtc attatgatgg ttgtttacag ctgggcgagt ggggctttcg aatcaatgac
120
ctgatgaaga cggtagaggg cgcggcaggg tgcattgagt attatgaaat gctcaacgaa
180
caacgccccg acttgtctta tgacatagac ggtattgttt ataaagttga tcagattgac
240
ctgcaagaag agcttggttt tattgtctgt gcgccacgct gggcaattgc tcgaaaattt
300
```

cctgctcaag aagaagttac gcgt
324

<210> 2132
<211> 108
<212> PRT
<213> Homo sapiens

<400> 2132
Ala Ser Arg Pro Leu Val Met Cys Ala Tyr Ser Ile Gly Tyr Val Glu
1 5 10 15
Gly Trp Asp Gln Pro Asp Ser His Tyr Asp Gly Leu Leu Gln Leu Gly
20 25 30
Glu Trp Gly Phe Arg Ile Asn Asp Leu Met Lys Thr Val Glu Gly Ala
35 40 45
Ala Gly Cys Ile Glu Tyr Tyr Glu Met Leu Asn Glu Gln Arg Pro Asp
50 55 60
Leu Ser Tyr Asp Ile Asp Gly Ile Val Tyr Lys Val Asp Gln Ile Asp
65 70 75 80
Leu Gln Glu Glu Leu Gly Phe Ile Ala Arg Ala Pro Arg Trp Ala Ile
85 90 95
Ala Arg Lys Phe Pro Ala Gln Glu Glu Val Thr Arg
100 105

<210> 2133
<211> 292
<212> DNA
<213> Homo sapiens

<400> 2133
ggtacctgca atatggtatt gcatgacatg aataaatttt tccttactct gaactcacta
60
gtggctgtct ttagaggacc cggcgaaatt ttcttgcctt ttcccacttg ctccatcaca
120
tacatcacat caccaacacc catcacatac atacacagtc atgaacggcc atcaggccac
180
accagattac atcgtgtggt atccaacct gcatttttctt gccctctctt tactgagagt
240
gtcacctcta ccgggaaagg tcttcaacct ccaagtttcc cagtaattta tt
292

<210> 2134
<211> 93
<212> PRT
<213> Homo sapiens

<400> 2134
Met Val Leu His Asp Met Asn Lys Phe Phe Leu Thr Leu Asn Ser Leu
1 5 10 15
Val Ala Val Phe Arg Gly Pro Gly Glu Leu Phe Leu Leu Phe Pro Thr
20 25 30
Cys Ser Ile Thr Tyr Ile Thr Ser Pro Thr Pro Ile Thr Tyr Ile His
35 40 45
Ser His Glu Arg Pro Ser Gly His Thr Arg Leu His Arg Cys Gly Ser

50	55	60
Asn Pro Ala Phe Ser Cys	Pro Ser Phe Thr Ala	Ser Val Thr Ser Thr
65	70	75
Arg Lys Gly Leu Gln Pro	Pro Ser Phe Pro Val	Ile Tyr
85	90	

<210> 2135

<211> 439

<212> DNA

<213> Homo sapiens

<400> 2135

acgcgttcca ttggtgtgtc gaatttcaag accgagcatc tggacgccat cgagggggcc
60
actccgagcg tcgaccaaat cgagatgcat ccctcgttca accagggcgc cttccgcgca
120
gagctggccg agcgcgccat taaccgggag gcctggagcc cgctgggcca gtcgaaggac
180
ctcgacaatc ccgtcctcac cgatatttcc aaggcgactg gaaagacgcc tgcccaggtg
240
gtcattcgct ggcacctgca gatcggcaac gtggtattcc ccaagtcggt gacaccatca
300
cgaattgccg agaactttga tgtgttcgat ttcgagctgt ctgacgagca gatcgccgca
360
attgatggcc tggatcacgg caacaggctc ggtggtgacc cttctaccgc cgacttctga
420
ttctgcaaca ataaccggt
439

<210> 2136

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2136

Thr Arg Ser Ile Gly Val Ser Asn Phe Lys Thr Glu His Leu Asp Ala	
1	15
Ile Glu Gly Ala Thr Pro Ser Val Asp Gln Ile Glu Met His Pro Ser	
20	30
Phe Asn Gln Ala Thr Phe Arg Ala Glu Leu Ala Glu Arg Gly Ile Asn	
35	45
Pro Glu Ala Trp Ser Pro Leu Gly Gln Ser Lys Asp Leu Asp Asn Pro	
50	60
Val Leu Thr Asp Ile Ser Lys Ala Thr Gly Lys Thr Pro Ala Gln Val	
65	80
Val Ile Arg Trp His Leu Gln Ile Gly Asn Val Val Phe Pro Lys Ser	
85	95
Val Thr Pro Ser Arg Ile Ala Glu Asn Phe Asp Val Phe Asp Phe Glu	
100	110
Leu Ser Asp Glu Gln Ile Ala Ala Ile Asp Gly Leu Asp His Gly Asn	
115	125
Arg Leu Gly Gly Asp Pro Ser Thr Ala Asp Phe	
130	135

<210> 2137
 <211> 330
 <212> DNA
 <213> Homo sapiens

<400> 2137
 nncctttgcc ttggtgata ccctcaccac ctgggaacat cccccagaca ccctcttaac
 60
 tccgggacag agatggctgg cggagcctgg ggccgcctgg cctgttactt ggagttcctg
 120
 aagaaggagg agctgaagga gttccagctt ctgctcgcca ataaagcgca ctccaggagc
 180
 tcttccggtg agacacccgc tcagccagag aagacgagtg gcatggaggt ggccctgtac
 240
 ctggtggctc agtatgggga gcagcgggcc tgggacctag ccctccatac ctgggagcag
 300
 atggggctga ggtaactgtg cgcccaagcc
 330

<210> 2138
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 2138
 Met Ala Gly Gly Ala Trp Gly Arg Leu Ala Cys Tyr Leu Glu Phe Leu
 1 5 10 15
 Lys Lys Glu Glu Leu Lys Glu Phe Gln Leu Leu Leu Ala Asn Lys Ala
 20 25 30
 His Ser Arg Ser Ser Ser Gly Glu Thr Pro Ala Gln Pro Glu Lys Thr
 35 40 45
 Ser Gly Met Glu Val Ala Ser Tyr Leu Val Ala Gln Tyr Gly Glu Gln
 50 55 60
 Arg Ala Trp Asp Leu Ala Leu His Thr Trp Glu Gln Met Gly Leu Arg
 65 70 75 80
 Ser Leu Cys Ala Gln Ala
 85

<210> 2139
 <211> 433
 <212> DNA
 <213> Homo sapiens

<400> 2139
 gacgattga ggcggcagaa caccgggatc aacagcaacc tgtcggacat ggccggccag
 60
 gtgaacaagc tggcgagtac catcgcccag tacaacgatc agatttccaa agtcaccacc
 120
 gccgcgggtg ccccgaaacga cctgctggac cagcgcagcg aggcgggtgcg ccagttgtcc
 180
 gagctggtcg ggaccaggt ggtccagcgc ggttcgagtt atgacgtcta tatcggcagc
 240
 ggtcagcgcc tggatgatggg caacagcacc aacaccctgt ccgcagtgcc gagcaaggac
 300

gacccgagcc agtcggcctt gcagctggat cgcggcacca gcaccgtcga tatcacctcc
 360
 acggtgaccg gtggcgagat cgggtggtctg ctgcgctatc gcagcgatgt gctcgacccg
 420
 tcgatcaacg cgt
 433

<210> 2140
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 2140
 Glu Gln Leu Ser Ala Gln Asn Thr Gly Ile Asn Ser Asn Leu Ser Asp
 1 5 10 15
 Met Ala Gly Gln Val Asn Lys Leu Ala Ser Thr Ile Ala Gln Tyr Asn
 20 25 30
 Asp Gln Ile Ser Lys Val Thr Thr Ala Ala Gly Ala Pro Asn Asp Leu
 35 40 45
 Leu Asp Gln Arg Ser Glu Ala Val Arg Gln Leu Ser Glu Leu Val Gly
 50 55 60
 Thr Gln Val Val Gln Arg Gly Ser Ser Tyr Asp Val Tyr Ile Gly Ser
 65 70 75 80
 Gly Gln Arg Leu Val Met Gly Asn Ser Thr Asn Thr Leu Ser Ala Val
 85 90 95
 Pro Ser Lys Asp Asp Pro Ser Gln Ser Ala Leu Gln Leu Asp Arg Gly
 100 105 110
 Thr Ser Thr Val Asp Ile Thr Ser Thr Val Thr Gly Gly Glu Ile Gly
 115 120 125
 Gly Leu Leu Arg Tyr Arg Ser Asp Val Leu Asp Pro Ser Ile Asn Ala
 130 135 140

<210> 2141
 <211> 426
 <212> DNA
 <213> Homo sapiens

<400> 2141
 nnatatccat gcagcgatcc tcatcaattt gctgtgttat taggctttgg tgcgacggct
 60
 gtttatcctt atctttcttt ccgcttgatc aatgatattg tggataaagg cgaagtgtta
 120
 ggtgacccaa ttgcttgtca tgttaaatat cgtaaaggta ttaacaaagg cttgatgaaa
 180
 atcctgtcta aaatgggtat ttcaacgatt gcctcttata gtgggtgcgca attgtttgaa
 240
 gcggttggtc tggatactaa agtggtcgac ctttgtttca aaggcggttc aagtcgtatc
 300
 aaaggtgctc gttttgaaga ttccagcgt gatcaagcaa cgattgccaa taatgcttgg
 360
 aagttacgta aacctattca acagggcggt tatcttaaata acgtacatga ctctgagtat
 420
 cacgcg
 426

<210> 2142
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 2142
 Xaa Tyr Pro Cys Ser Asp Pro His Gln Phe Ala Val Leu Leu Gly Phe
 1 5 10 15
 Gly Ala Thr Ala Val Tyr Pro Tyr Leu Ser Phe Arg Leu Ile Asn Asp
 20 25 30
 Met Val Asp Lys Gly Glu Val Leu Gly Asp Pro Ile Ala Cys His Val
 35 40 45
 Lys Tyr Arg Lys Gly Ile Asn Lys Gly Leu Met Lys Ile Leu Ser Lys
 50 55 60
 Met Gly Ile Ser Thr Ile Ala Ser Tyr Arg Gly Ala Gln Leu Phe Glu
 65 70 75 80
 Ala Val Gly Leu Asp Thr Lys Val Val Asp Leu Cys Phe Lys Gly Val
 85 90 95
 Ala Ser Arg Ile Lys Gly Ala Arg Phe Glu Asp Phe Gln Arg Asp Gln
 100 105 110
 Ala Thr Ile Ala Asn Asn Ala Trp Lys Leu Arg Lys Pro Ile Gln Gln
 115 120 125
 Gly Gly Tyr Leu Lys Tyr Val His Asp Ser Glu Tyr His Ala
 130 135 140

<210> 2143
 <211> 1008
 <212> DNA
 <213> Homo sapiens

<400> 2143
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 tgtcatattg tacgcagtat gtcttttcaa cgattcttgg cgggggtggc agccatcttg
 120
 cttctcctgc ctactgcgtg cgctgatgat gcgcaggcgc ccgttgtcga taacctcggg
 180
 acggtcctca gcccctcaa ctccctcatt cgcgagccgg cgaattcgtc agtcaacggg
 240
 acgctcaaga gcacatatga gtacctcgg ctcacgacg gtcacgatct acccgacgac
 300
 gatggctacg ctcacgatca tctggtcgcg gctttgcgcc cgtatttggg gaatgggtgga
 360
 gacagtcggc aggcccacgt caccacaactc atggcggcgt catccctgaa aacctcaac
 420
 gcgttgctccg acaaggagag atcagaggtc gacaaacgta cccgcctgcc gaagggtgc
 480
 atcacgagaa agacgggtgat gacggatctg cccatcgga cgatgaggcg ggagatcggc
 540
 ctgtccaacg acgggttggt cctcacaccg tggaagggtca agacgacttc ttccgaggag
 600
 gctcggtggg cgatgcaggc gctggccagt gccgacctat tcagcaatgc taaggacgcc
 660

gagaaatggg ggtgggagtc gatctcggac gggatatttgc gccatctcga gacctacagt
 720
 ggccccagta cgactatcgc gatggccttg tcggcggcga ataccgtctc tacattgtct
 780
 cgttcccagt tgcaacgcat cggcgacagt ctgcgcatg cgccatatcc gaggaaggac
 840
 cttgggtccg cgctcattcg caatggaaag cgggtcaagg acaagtgcag tatcgaatcg
 900
 gcgtacctgt tgaggatattc cggaattgg gcgtggtgac atgacggttt cttggcaagg
 960
 tgtgaccaag acattccctt cgggcgattc cgcgcgtggg ggggtgcac
 1008

<210> 2144

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2144

Met	Phe	Thr	Gly	Asp	Ala	Val	Val	Ile	Val	Glu	Val	Ser	Gln	Leu	Cys
1				5					10					15	
His	Ile	Val	Arg	Ser	Met	Ser	Phe	Gln	Arg	Phe	Leu	Ala	Gly	Val	Ala
			20					25					30		
Ala	Ile	Leu	Leu	Leu	Leu	Pro	Thr	Ala	Cys	Ala	Asp	Asp	Ala	Gln	Ala
		35					40					45			
Pro	Val	Val	Asp	Asn	Leu	Gly	Thr	Val	Leu	Ser	Pro	Ser	Asn	Ser	Leu
	50				55						60				
Ile	Arg	Glu	Pro	Ala	Asn	Ser	Ser	Val	Asn	Gly	Thr	Leu	Lys	Ser	Thr
65					70					75				80	
Tyr	Glu	Tyr	Leu	Arg	Leu	Ile	Asp	Gly	His	Asp	Leu	Pro	Asp	Asp	Asp
				85					90					95	
Gly	Tyr	Ala	His	Asp	His	Leu	Val	Ala	Ala	Leu	Arg	Pro	Tyr	Leu	Val
			100					105					110		
Asn	Gly	Gly	Asp	Ser	Arg	Gln	Ala	His	Val	Thr	Gln	Leu	Met	Ala	Ala
		115				120						125			
Ser	Ser	Leu	Lys	Thr	Leu	Asn	Ala	Leu	Ser	Asp	Lys	Glu	Arg	Ser	Glu
		130				135					140				
Val	Asp	Lys	Arg	Thr	Arg	Leu	Pro	Lys	Gly	Cys	Ile	Thr	Arg	Lys	Thr
145					150					155				160	
Val	Met	Thr	Asp	Leu	Pro	Ile	Ala	Thr	Met	Arg	Arg	Glu	Ile	Gly	Leu
				165					170					175	
Ser	Asn	Asp	Gly	Leu	Cys	Leu	Thr	Pro	Trp	Lys	Val	Lys	Thr	Thr	Ser
			180					185					190		
Ser	Glu	Glu	Ala	Arg	Trp	Ala	Met	Gln	Ala	Leu	Ala	Ser	Ala	Asp	Leu
		195				200						205			
Phe	Ser	Asn	Ala	Lys	Asp	Ala	Glu	Lys	Trp	Gly	Trp	Glu	Ser	Ile	Ser
	210					215					220				
Asp	Gly	Tyr	Leu	Arg	His	Leu	Glu	Thr	Tyr	Ser	Gly	Pro	Ser	Thr	Thr
225					230					235				240	
Ile	Ala	Met	Ala	Leu	Ser	Ala	Ala	Asn	Thr	Val	Ser	Thr	Leu	Ser	Arg
				245					250					255	
Ser	Gln	Leu	Gln	Arg	Ile	Gly	Asp	Ser	Leu	Ala	Asp	Ala	Pro	Tyr	Pro
			260					265					270		
Arg	Lys	Asp	Leu	Gly	Pro	Ala	Leu	Ile	Arg	Asn	Gly	Lys	Pro	Val	Lys

275 280 285
 Asp Lys Cys Ser Ile Glu Ser Ala Tyr Leu Leu Arg Tyr Ser Gly Asn
 290 295 300
 Trp Ala Trp
 305

<210> 2145
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 2145
 tctagaatcg tgtataacat tctacacaat aagctaagcc tactcttgta gagtgcgac
 60
 atgacaaccc ttgaacaatc attatctcaa attcccgcac ttctcgattat tcatgaacat
 120
 ttatttagct cggcccagcc ttctgctgaa caactaaaat tgattaaaga gtttggttgt
 180
 agcacagtca ttaaccttgc ttttaactaat gcttcaaate atcttgagaa tgaagaccgt
 240
 atttggttag accttggttt aaattatatt catattccaa ttgattggga gatgccttct
 300
 gctgagcagt gcttattagt tttagatttg attgatcatt tagtgcaaaa tgaaattggt
 360
 tggatacatt gcgccaaaaa taaacgcgt
 389

<210> 2146
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2146
 Met Thr Thr Leu Glu Gln Ser Leu Ser Gln Ile Pro Ala Phe Ser Ile
 1 5 10 15
 Ile His Glu His Leu Phe Ser Ser Ala Gln Pro Ser Ala Glu Gln Leu
 20 25 30
 Lys Leu Ile Lys Glu Phe Gly Cys Ser Thr Val Ile Asn Leu Ala Leu
 35 40 45
 Thr Asn Ala Ser Asn His Leu Glu Asn Glu Asp Arg Ile Cys Leu Asp
 50 55 60
 Leu Gly Leu Asn Tyr Ile His Ile Pro Ile Asp Trp Glu Met Pro Ser
 65 70 75 80
 Ala Glu Gln Cys Leu Leu Val Leu Asp Leu Ile Asp His Leu Val Gln
 85 90 95
 Asn Glu Ile Val Trp Ile His Cys Ala Lys Asn Lys Arg
 100 105

<210> 2147
 <211> 235
 <212> DNA
 <213> Homo sapiens

<400> 2147

ctccctgcgg gctgcgtctc cgaggacatg tgcagtcctg acccctgttt caatgggtggg
 60
 atttgccctg tcacctggaa tgacttccac tgtacctgcc ctgccaattt cacggggcct
 120
 acatgtgccc agcagctgtg gtgtcccggc cagccctgtc tcccacctgc cacgtgtgtg
 180
 gcggaggcca cgttccgcga ggggtccccc gccgcgttca gcgggcacaa cgcgt
 235

<210> 2148

<211> 78

<212> PRT

<213> Homo sapiens

<400> 2148

Leu	Pro	Ala	Gly	Cys	Val	Ser	Glu	Asp	Met	Cys	Ser	Pro	Asp	Pro	Cys
1				5				10					15		
Phe	Asn	Gly	Gly	Thr	Cys	Leu	Val	Thr	Trp	Asn	Asp	Phe	His	Cys	Thr
		20						25					30		
Cys	Pro	Ala	Asn	Phe	Thr	Gly	Pro	Thr	Cys	Ala	Gln	Gln	Leu	Trp	Cys
		35					40					45			
Pro	Gly	Gln	Pro	Cys	Leu	Pro	Pro	Ala	Thr	Cys	Val	Ala	Glu	Ala	Thr
	50					55					60				
Phe	Arg	Glu	Gly	Pro	Pro	Ala	Ala	Phe	Ser	Gly	His	Asn	Ala		
65					70					75					

<210> 2149

<211> 1474

<212> DNA

<213> Homo sapiens

<400> 2149

ntactgccac cattggaact tttgatgttg atggggaaga gttgcaacac ctccagggtt
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 gtccctgctga tgggtggctgc gaatgatttg ccttgacaat agctgaaaaa ccaccatctg
 120
 caacacgtgg gagtaagact tctcctgctc tttgccagtg gtctgaggtg atgaaccacc
 180
 ctggcttggt gtgctgtgtc cagcaaacta caggggtgcc gctggtagtt atgggtgaaac
 240
 cagacacttt tcttatccac gagattaaga ctcttctctg taaagcgaag atccaagaca
 300
 tggttgctat taggcacacg gcctgcaatg agcagcagcg gacaacaatg attctgctgt
 360
 gtgaggatgg cagcctgcgc atttacatgg ccaacgtgga gaacacctcc tactggctgc
 420
 agccatccct gcagcccagc agtgtcatca gcatcatgaa gcctgttcga aagcgcaaaa
 480
 cagctacaat cacaaccng cacgtctagc caggtgactt tccccattga cttttttgaa
 540
 cacaaccagc agctgacaga tgtggagttt ggtggtaacg acctcctaca ggtctataat
 600
 gcacaacaga taaaacaccg gctgaattcc actggcatgt atgtggccaa caccaagccc
 660

ggaggcttca ccattgagat tagtaacaac aatagcacta tggatgatgac aggcattgcgg
 720
 atccagattg ggactcaagc aatagaacgg gccccgtcat atatcgagat cttcggcaga
 780
 actatgcagc tcaacctgag tcgctcacgc tggtttgact tcccccttcac cagagaagaa
 840
 gccttcgagg ctgataagaa gctgaacctc ttcattgggg cctcgggtgga tccagcaggt
 900
 gtcaccatga tagatgctgt aaaaatttat ggcaagacta aggagcagtt tggctggcct
 960
 gatgagcccc cagaagaatt cccttctgcc tctgtcagca acatctgccc ttcaaattctg
 1020
 aaccagagca acggcactgg agatagcgac tcagctgccc ccactacgac cagtgggaact
 1080
 gtcctggaga ggctgggtgt gagttcttta gaagccctgg aaagctgctt tgccgttggc
 1140
 ccaatcatcg agaaggagag aaacaagaat gctgctcagg agctggccac tttgctgttg
 1200
 tcctgccag cacctgccag tgtccagcag cagtccaaga gccttctggc cagcctgcac
 1260
 accagccgct cggcctacca cagccacaag gtaactgttc tctcagggaa aggaaattgc
 1320
 agtgetgaca gggaatcaaa taagttagct cttcattgta aagcaacagc acagcaaagt
 1380
 aaggtagagg gaggatagca ttcagattag acctacattt tacagagttt ctctgagaa
 1440
 attctcaagt gccactcaaa actgagggtg agcc
 1474

<210> 2150

<211> 312

<212> PRT

<213> Homo sapiens

<400> 2150

Ser	Leu	Phe	Glu	Ser	Ala	Lys	Gln	Leu	Gln	Ser	Gln	Pro	Xaa	Thr	Ser
1				5				10						15	
Ser	Gln	Val	Thr	Phe	Pro	Ile	Asp	Phe	Phe	Glu	His	Asn	Gln	Gln	Leu
		20						25				30			
Thr	Asp	Val	Glu	Phe	Gly	Gly	Asn	Asp	Leu	Leu	Gln	Val	Tyr	Asn	Ala
		35					40					45			
Gln	Gln	Ile	Lys	His	Arg	Leu	Asn	Ser	Thr	Gly	Met	Tyr	Val	Ala	Asn
		50				55					60				
Thr	Lys	Pro	Gly	Gly	Phe	Thr	Ile	Glu	Ile	Ser	Asn	Asn	Asn	Ser	Thr
65					70					75				80	
Met	Val	Met	Thr	Gly	Met	Arg	Ile	Gln	Ile	Gly	Thr	Gln	Ala	Ile	Glu
				85				90						95	
Arg	Ala	Pro	Ser	Tyr	Ile	Glu	Ile	Phe	Gly	Arg	Thr	Met	Gln	Leu	Asn
			100					105					110		
Leu	Ser	Arg	Ser	Arg	Trp	Phe	Asp	Phe	Pro	Phe	Thr	Arg	Glu	Glu	Ala
		115					120					125			
Leu	Gln	Ala	Asp	Lys	Lys	Leu	Asn	Leu	Phe	Ile	Gly	Ala	Ser	Val	Asp
		130				135						140			
Pro	Ala	Gly	Val	Thr	Met	Ile	Asp	Ala	Val	Lys	Ile	Tyr	Gly	Lys	Thr

145 150 155 160
 Lys Glu Gln Phe Gly Trp Pro Asp Glu Pro Pro Glu Glu Phe Pro Ser
 165 170 175
 Ala Ser Val Ser Asn Ile Cys Pro Ser Asn Leu Asn Gln Ser Asn Gly
 180 185 190
 Thr Gly Asp Ser Asp Ser Ala Ala Pro Thr Thr Thr Ser Gly Thr Val
 195 200 205
 Leu Glu Arg Leu Val Val Ser Ser Leu Glu Ala Leu Glu Ser Cys Phe
 210 215 220
 Ala Val Gly Pro Ile Ile Glu Lys Glu Arg Asn Lys Asn Ala Ala Gln
 225 230 235 240
 Glu Leu Ala Thr Leu Leu Leu Ser Leu Pro Ala Pro Ala Ser Val Gln
 245 250 255
 Gln Gln Ser Lys Ser Leu Leu Ala Ser Leu His Thr Ser Arg Ser Ala
 260 265 270
 Tyr His Ser His Lys Val Thr Val Leu Ser Gly Lys Gly Asn Cys Ser
 275 280 285
 Ala Asp Arg Glu Ser Asn Lys Leu Ala Leu His Cys Lys Ala Thr Ala
 290 295 300
 Gln Gln Ser Lys Val Glu Gly Gly
 305 310

<210> 2151

<211> 511

<212> DNA

<213> Homo sapiens

<400> 2151

gccggcggttt acctgtggggg cccgggtcggg cgcggaaga cctggctgat ggatcaattc
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 caccaaagcc tgnncgggtg cggcgcnngg cggcagcact ttcatactt catgggctgg
 120
 gtgcatacgc gtccttttca gttgaccggg atcgccgatc cattgcgggc gctggctcgt
 180
 gagctggcgg ccgaggtgcg ggtgctgtgt ttcgatgagc tggtcgtcaa tgacatcggg
 240
 gacgcgatca ttctcgggcg cctgtttcag gtgatgttcg acgcaggcgt ggtgggtggc
 300
 tgcacctcca atctgccgcc ggatcagctg tatgccgacg gttcaaccg cgaccgttc
 360
 ctgccggcga tcaccgcgat caaacagcac atgcaagtgg tcgcggtgaa tggcgcgga
 420
 gatcatcgct tgcattcccg cgccatcgag cagcgttact gggtcgctct gccggagcag
 480
 ggtagcgcgt tgagccagggt gttcgacgcg t
 511

<210> 2152

<211> 170

<212> PRT

<213> Homo sapiens

<400> 2152

Ala Gly Val Tyr Leu Trp Gly Pro Val Gly Arg Gly Lys Thr Trp Leu

1	5	10	15
Met Asp Gln Phe His Gln Ser Leu Xaa Gly Cys Arg Arg Xaa Arg Gln			
	20	25	30
His Phe His His Phe Met Gly Trp Val His Gln Arg Ser Phe Gln Leu			
	35	40	45
Thr Gly Ile Ala Asp Pro Leu Arg Ala Leu Ala Arg Glu Leu Ala Ala			
	50	55	60
Glu Val Arg Val Leu Cys Phe Asp Glu Leu Phe Val Asn Asp Ile Gly			
65	70	75	80
Asp Ala Ile Ile Leu Gly Arg Leu Phe Gln Val Met Phe Asp Ala Gly			
	85	90	95
Val Val Val Val Cys Thr Ser Asn Leu Pro Pro Asp Gln Leu Tyr Ala			
	100	105	110
Asp Gly Phe Asn Arg Asp Arg Phe Leu Pro Ala Ile Thr Ala Ile Lys			
	115	120	125
Gln His Met Gln Val Val Ala Val Asn Gly Ala Glu Asp His Arg Leu			
	130	135	140
His Pro Gly Ala Ile Glu Gln Arg Tyr Trp Val Ala Leu Pro Glu Gln			
145	150	155	160
Gly Ser Ala Leu Ser Gln Val Phe Asp Ala			
	165	170	

<210> 2153

<211> 528

<212> DNA

<213> Homo sapiens

<400> 2153

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nnaccggtgc caaagagctg gggatcaacc tgccgaacac cgccggtacg cagcaggtgt
60
tcagtacgtg cacggcgatt ggcggcggca attgggacca ctccgcgctg atcaagggcc
120
tggagcatat ggccaacttt tcgattcgcg atcaataagc cacaccgctc ccacctttga
180
tggcattcca agtctgaaat tgatccatct ctaataacaa aaatccccgg gagccccgtt
240
atgtcggctg atccgcaaca cctgcttcgc gagctgtttg ccacagccat cgatgccgcc
300
cacccccggc atgtccttga accttatctg cccgctgacc gcacaggccg tgtgattgtg
360
attgggcccc gcaaaaccgc acccgccatg gccctcgctg tcgagaacgg ctggcaaggg
420
gaagtcaacc gcttggtggt caccgctac ggccacggcg cgccgtgcaa aaaaatcgaa
480
gtggtcgagg ccgctcaccg ggtgccggat gccgcgggccc tggcggtg
528

```

<210> 2154

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2154

Met Ser Val Asp Pro Gln His Leu Leu Arg Glu Leu Phe Ala Thr Ala


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      1           5           10           15
Ile Asp Ala Ala His Pro Arg His Val Leu Glu Pro Tyr Leu Pro Ala
      20           25           30
Asp Arg Thr Gly Arg Val Ile Val Ile Gly Pro Gly Lys Thr Ala Pro
      35           40           45
Ala Met Ala Leu Val Val Glu Asn Gly Trp Gln Gly Glu Val Thr Gly
      50           55           60
Leu Val Val Thr Arg Tyr Gly His Gly Ala Pro Cys Lys Lys Ile Glu
      65           70           75           80
Val Val Glu Ala Ala His Pro Val Pro Asp Ala Ala Gly Leu Ala Val
      85           90           95

```

<210> 2155

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2155

```

gtgcaccgcc acggcacacc cgccatgccg cgccgctatt tcgaggccct gctgcaggag
60
ttcggccccg actgcgaggt gctcaccgtc accgattcag agggcaaccc cctcagttcg
120
gtgctcagtt tctacttccg tgatgaagtg ctgccctact atgcggggcga cgccgtcgcg
180
gcgcgcgaac tggcggccaa tgacttcaaa tactgggagc tgatgcgacg cgctgtgcg
240
cgcgggcctca aggtgtttga ctacggccgc agcaagcagg gcacgggctc ctacgcn
297

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<210> 2156

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2156

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Met Pro Arg Arg Tyr Phe Glu Ala Leu Leu Gln Glu Phe Gly Pro Asp
1           5           10           15
Cys Glu Val Leu Thr Val Thr Asp Ser Glu Gly Asn Pro Leu Ser Ser
      20           25           30
Val Leu Ser Phe Tyr Phe Arg Asp Glu Val Leu Pro Tyr Tyr Ala Gly
      35           40           45
Asp Ala Val Ala Ala Arg Glu Leu Ala Ala Asn Asp Phe Lys Tyr Trp
      50           55           60
Glu Leu Met Arg Arg Ala Cys Ala Arg Gly Leu Lys Val Phe Asp Tyr
      65           70           75           80
Gly Arg Ser Lys Gln Gly Thr Gly Ser Tyr Ala
      85           90

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<210> 2157

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2157

naccgagata acgaggtcgt catcatctcc actgggtccc aaggtgagcc actttcggcc
 60
 ctagcaagga tcgccaaccg agagcaccga gacatcgagg tgggggaggg agataccgtt
 120
 ttgctggcat cctctctcat cccgggtaat gagaatgccg tctatcgagt gattaatggc
 180
 ctgacgaagc ttggcgccgc cgtggtacat aagggaacg ctttgggtcca cgtttcgggc
 240
 catgccgcag ccggagagct gctgtacgcg tataacatcg tgcggccacg cgctgtgatg
 300
 ccgattcatg gtgaggtgcg tcatcttgtc gctaattgccg atctggccaa agcaaccggt
 360
 gtcgatgaga acaacgtggt gcttgtcgag gacggcgggg ttattgacct tgttgacgga
 420
 gtaccgcgag ttgttggtcaa ggtcgatgcc tcgtacatcc ttgttgacgg atctgggggtg
 480
 ggggagctta ccgaggacac gctcactgat cgccgatatcc tcggtgagga gggattcttg
 540
 tcagtcgtca ccgtggtcga caccgcctcg gcgtcagtgg tgtctcgccc ggcgatccag
 600
 gcgcgtgggt ttgccgaggg cgactcggtc ttcgcggaga tcaccgacca gatcgtcacc
 660
 gagctagaga aggcgatggc cgggtggtatg gacgataccc accggttgca a
 711

<210> 2158

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2158

Xaa	Arg	Asp	Asn	Glu	Val	Val	Ile	Ile	Ser	Thr	Gly	Ser	Gln	Gly	Glu
1			5						10					15	
Pro	Leu	Ser	Ala	Leu	Ala	Arg	Ile	Ala	Asn	Arg	Glu	His	Arg	Asp	Ile
			20					25					30		
Glu	Val	Gly	Glu	Gly	Asp	Thr	Val	Leu	Leu	Ala	Ser	Ser	Leu	Ile	Pro
		35					40					45			
Gly	Asn	Glu	Asn	Ala	Val	Tyr	Arg	Val	Ile	Asn	Gly	Leu	Thr	Lys	Leu
	50					55					60				
Gly	Ala	Ala	Val	Val	His	Lys	Gly	Asn	Ala	Leu	Val	His	Val	Ser	Gly
65					70				75					80	
His	Ala	Ala	Ala	Gly	Glu	Leu	Leu	Tyr	Ala	Tyr	Asn	Ile	Val	Arg	Pro
			85						90					95	
Arg	Ala	Val	Met	Pro	Ile	His	Gly	Glu	Val	Arg	His	Leu	Val	Ala	Asn
			100					105					110		
Ala	Asp	Leu	Ala	Lys	Ala	Thr	Gly	Val	Asp	Glu	Asn	Asn	Val	Val	Leu
		115					120					125			
Val	Glu	Asp	Gly	Gly	Val	Ile	Asp	Leu	Val	Asp	Gly	Val	Pro	Arg	Val
		130				135					140				
Val	Gly	Lys	Val	Asp	Ala	Ser	Tyr	Ile	Leu	Val	Asp	Gly	Ser	Gly	Val
145					150					155				160	
Gly	Glu	Leu	Thr	Glu	Asp	Thr	Leu	Thr	Asp	Arg	Arg	Ile	Leu	Gly	Glu
			165						170				175		
Glu	Gly	Phe	Leu	Ser	Val	Val	Thr	Val	Val	Asp	Thr	Arg	Ser	Ala	Ser

```

                180                185                190
Val Val Ser Arg Pro Ala Ile Gln Ala Arg Gly Phe Ala Glu Gly Asp
                195                200                205
Ser Val Phe Ala Glu Ile Thr Asp Gln Ile Val Thr Glu Leu Glu Lys
                210                215                220
Ala Met Ala Gly Gly Met Asp Asp Thr His Arg Leu Gln
225                230                235

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<210> 2159
 <211> 322
 <212> DNA
 <213> Homo sapiens

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<400> 2159
tcgcgagcac actccagcct ctggagagac gacaacgcgt gaagggggcac cagcttgcg
60
ggcagcagct ccagggggcgg cctgggaggg ctttgtgcag aagaagcctg tttccttcta
120
cctgttttga aaagtgtgt ctgcagatgg tgggtgagag ttcgctgccca gggccactgt
180
cttccttgcc ctgcggacac ttcttcccca ccttcctaaa gctgtggggag acctggagcc
240
gtggagcatc aatggctctt tgactcagga atcttaaaaa atcacaccct ggggctacca
300
tgggggcctt ctggttctcc tt
322

```

<210> 2160
 <211> 100
 <212> PRT
 <213> Homo sapiens

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<400> 2160
Met Val Ala Pro Gly Cys Asp Phe Leu Arg Phe Leu Ser Gln Arg Ala
1          5          10          15
Ile Asp Ala Pro Arg Leu Gln Val Ser His Ser Phe Arg Lys Val Gly
20        25        30
Lys Lys Cys Pro Gln Gly Arg Glu Asp Ser Gly Pro Gly Ser Glu Leu
35        40        45
Ser Pro Thr Ile Cys Arg Asp Asn Phe Ser Lys Gln Val Glu Gly Asn
50        55        60
Arg Leu Leu Leu His Lys Ala Leu Pro Gly Arg Pro Trp Ser Cys Cys
65        70        75        80
Pro Ala Ser Trp Cys Pro Phe Thr Arg Cys Arg Leu Ser Arg Gly Trp
85        90        95
Ser Val Leu Ala
100

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<210> 2161
 <211> 1070
 <212> DNA
 <213> Homo sapiens

<400> 2161

tcttagggga agggaaggct tatctgaaga gtagacctct ggttttgaat gagggagaca
 60
 gtggggatat gaggggagga aacctcaaaa agaatatgta tccatcacta tgaaagggtta
 120
 ggctatacag gggaagcctc caaagggaaa tctggaaaaa tgttctgaga gggacattaa
 180
 ggatgtactc agaaattaag aaaacatatt aggacttgcc aaaagtgaga gaagcaactg
 240
 aggagactta tatgcaaaaa tcgcaaagaa ggagagaaca aaagatggag gttggatgct
 300
 aaatagggaa agagaacgcg tgaatgaggt agggggcaga acatgcagtg cagaaaaaca
 360
 acagatatgg aagggcatta aagagggcta aatgggaata ttaggaaatg agagttggga
 420
 atttgtcaga gttgtgtatt aacaaggaga gggtaaggta agaaggtggc aaagtaagag
 480
 ccagggcata aggttttgcg gtccaggaag ctttgttggg aaaatgtag aagtaatggg
 540
 tttggtcagt atgggtgagag gtgagagagg ctaaatggga tgggcataaa gggcaggcca
 600
 gtggcaagaa tcctatgaaa gtgtaggcag atctgagagc acagacaaat acagtggaga
 660
 atgtggcaca gggcagaggg cagtgggctg agcagcgagt gcccatgggg aggggagtat
 720
 ccagaagaac ccattgagtc cctaagaatg acacacaggt gacagctgaa agaaggaggg
 780
 acacagaaga tatagcagca tgattctctg gggcaaaatg aggaagaaag gaatggaaga
 840
 agaaagtgaa gggttcctgc tgatgtgagg ggatgactgg aggaaaggca ggtattgact
 900
 ggggggtaaa ggaaccattc ttggatcaag gttatgatgg aataagaagg aagagagagc
 960
 tggctagctg agtaaaggac catcgataa aacagacaaa agttaagact agatggagtg
 1020
 gcaactaggc agatcagatg tattttttaa aggggaaact gctaagatct
 1070

<210> 2162

<211> 145

<212> PRT

<213> Homo sapiens

<400> 2162

Met	Val	Leu	Tyr	Ser	Ala	Ser	Gln	Leu	Ser	Leu	Pro	Ser	Tyr	Ser	Ile
1				5					10					15	
Ile	Thr	Leu	Ile	Gln	Glu	Trp	Phe	Leu	Tyr	Pro	Pro	Val	Asn	Thr	Cys
			20					25					30		
Leu	Ser	Ser	Ser	His	Pro	Leu	Thr	Ser	Ala	Gly	Thr	Leu	His	Phe	Leu
		35				40					45				
Leu	Pro	Phe	Leu	Ser	Ser	Ser	Phe	Cys	Pro	Arg	Glu	Ser	Cys	Cys	Tyr
	50					55					60				
Ile	Phe	Cys	Val	Pro	Pro	Ser	Phe	Ser	Cys	His	Leu	Cys	Val	Ile	Leu
65				70					75					80	
Arg	Asp	Ser	Met	Gly	Ser	Ser	Gly	Tyr	Ser	Pro	Pro	His	Gly	His	Ser

85 90 95
 Leu Leu Ser Pro Leu Pro Ser Ala Leu Cys His Ile Leu His Cys Ile
 100 105 110
 Cys Leu Cys Ser Gln Ile Cys Leu His Phe His Arg Ile Leu Ala Thr
 115 120 125
 Gly Leu Pro Phe Met Pro Ile Pro Phe Ser Leu Ser His Leu Ser Pro
 130 135 140
 Tyr
 145

<210> 2163

<211> 657

<212> DNA

<213> Homo sapiens

<400> 2163

tattttaaattc tttataaaaa aggtaggagg atcaggactt cgacccccctt aaaacgcggc
 60
 ggccctccctc caatccacct ccacttcccta caccacccc getctcccc ccccccttt
 120
 tggttccggg ttggaagggt gggtgaaatg ggaaccgaat accaatttca cccgggaacc
 180
 agtaatgccc atgataaccg ccaagttggg accgaagttg ggatccataa gtacgggagg
 240
 ccagtggggg ggaattgggt taagccccct cccagccttt ctccgaccgc gtgctccgtc
 300
 agacatgcca agaggctctc tctccaggag agccacctgt gaaaccacc cggcatgctc
 360
 ctcccaccac tgtgcacaga cgagtgcctg ggctccagag agggagggag ctgaaggcct
 420
 cagacaggag tccgtccgt ccagtcctcat catcccaaga aacatccggc ccgactccct
 480
 gcagctccat ggctcaacaa ggtgcggatg cctgctggac ctgggtgctt tccatccaac
 540
 tttgatccct tccccagag gaagagtgt acctaggag aagtgtggtg cgcacaggca
 600
 tgcagcctgg tctcttgctc aggcggcttg cgcagattcc tagaggaatc tgcagcg
 657

<210> 2164

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2164

Met Pro Met Ile Thr Ala Lys Leu Gly Pro Lys Leu Gly Ser Ile Ser
 1 5 10 15
 Thr Gly Gly Gln Trp Gly Gly Ile Gly Leu Ser Pro Leu Pro Ala Phe
 20 25 30
 Leu Arg Pro Arg Ala Pro Ser Asp Met Pro Arg Gly Ser Leu Ser Arg
 35 40 45
 Arg Ala Thr Cys Glu Thr His Pro Ala Cys Ser Ser His His Cys Ala
 50 55 60
 Gln Thr Ser Ala Trp Ala Pro Glu Arg Glu Gly Ala Glu Gly Leu Arg

65		70		75		80									
Gln	Glu	Ser	Val	Pro	Ser	Ser	Pro	Ile	Ile	Pro	Arg	Asn	Ile	Arg	Pro
				85				90					95		
Asp	Ser	Leu	Gln	Leu	His	Gly	Ser	Thr	Arg	Cys	Gly	Cys	Leu	Leu	Asp
			100					105					110		
Leu	Ala	Ala	Phe	His	Pro	Thr	Leu	Ile	Pro	Ser	Pro	Arg	Gly	Arg	Val
		115					120					125			
Leu	Pro	Arg	Asp	Lys	Cys	Gly	Ala	His	Arg	His	Ala	Ala	Trp	Ser	Leu
	130					135					140				
Ala	Gln	Ala	Ala	Cys	Ala	Asp	Ser								
145					150										

<210> 2165

<211> 962

<212> DNA

<213> Homo sapiens

<400> 2165

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nctttctcat cgacagcgac gcacaaccgg cgacatcacc ggtgacggtt caaggtggca
60
gcccgagggc cgcgcgtgaa cttattgtgt cgtcttatgg aagaaaagtc actcggaagt
120
accgtaaata accccagcgc ctcacccccc gaatctgttc gccatctgct gtcgccctg
180
cgcttaaggc atcacccac tagactgacc gaagtctcgc cgaggaggc tagggaggct
240
taggtggcca ggaatgacat cgggacgacg tctacgcgtc gaataggcag cggacgtacg
300
tcgagtaccg gccgtacggt ggtgtcttct gaccgcacac gcagagctat cgctaaaaga
360
ttgatggccc gcacctcagc tatgacgacg gccactctag aggaaatggg tcgtcgacac
420
tcctggttcc gtgatctgtc agccgaagaa agatcgtgga tctcgatcgt ggctcgctca
480
ggtattgacg gcttcgtcca gtggtttgct gacgatgacg ccgagcccta cteccccacc
540
gacgtcttcg acgtggcgcc ccggtccatg acccgcaaga tctccttgca ccagacagtc
600
gagctcgtcc gcaccacgat tgacgtcgtt gaggcacaaa ttgagaccga aatgccacgc
660
ggtgatcgcc aagtgtcgcg cactgccatc gttcactact cccgcgaggt ggccttcgcc
720
gccgcgaggg ttacgcgcg agccgccgaa cgtcgcggta cctgggatga acgtctggaa
780
tccctcgtcg ttgatgccgt cgtgcgagcc gacgcgatg aacagtcac ctcgcgagct
840
tctactctcg gctggcgccc gggcatcaac ctctgcgtcg ttgtcgggcg ggccccgacg
900
accgagcatg aactccacgt gctgcgacgt gatggagaac gcatgcagat gacggtgcta
960
gc
962

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<210> 2166

<211> 239
 <212> PRT
 <213> Homo sapiens

<400> 2166
 Val Ala Arg Asn Asp Ile Gly Thr Thr Ser Thr Arg Arg Ile Gly Ser
 1 5 10 15
 Gly Arg Thr Ser Ser Thr Gly Arg Thr Val Val Ser Ser Asp Arg Thr
 20 25 30
 Arg Arg Ala Ile Ala Lys Arg Leu Met Ala Arg Thr Ser Ala Met Thr
 35 40 45
 Thr Ala Thr Leu Glu Glu Met Gly Arg Arg His Ser Trp Phe Arg Asp
 50 55 60
 Leu Ser Ala Glu Glu Arg Ser Trp Ile Ser Ile Val Ala Arg Ser Gly
 65 70 75 80
 Ile Asp Gly Phe Val Gln Trp Phe Ala Asp Asp Asp Ala Glu Pro Tyr
 85 90 95
 Ser Pro Thr Asp Val Phe Asp Val Ala Pro Arg Ser Met Thr Arg Lys
 100 105 110
 Ile Ser Leu His Gln Thr Val Glu Leu Val Arg Thr Thr Ile Asp Val
 115 120 125
 Val Glu Ala Gln Ile Glu Thr Glu Met Pro Arg Gly Asp Arg Gln Val
 130 135 140
 Leu Arg Thr Ala Ile Val His Tyr Ser Arg Glu Val Ala Phe Ala Ala
 145 150 155 160
 Ala Glu Val Tyr Ala Arg Ala Ala Glu Arg Arg Gly Thr Trp Asp Glu
 165 170 175
 Arg Leu Glu Ser Leu Val Val Asp Ala Val Val Arg Ala Asp Ala Asp
 180 185 190
 Glu Gln Leu Ile Ser Arg Ala Ser Thr Leu Gly Trp Arg Pro Gly Ile
 195 200 205
 Asn Leu Cys Val Val Val Gly Arg Ala Pro Thr Thr Glu His Glu Leu
 210 215 220
 His Val Leu Arg Arg Asp Gly Glu Arg Met Gln Met Thr Val Leu
 225 230 235

<210> 2167
 <211> 325
 <212> DNA
 <213> Homo sapiens

<400> 2167
 accggtgcag tttgtgaggg gttggtgacg cccgatcggg aggttcacgc cgtcacggcg
 60
 catccacatt atcccgactg gaagatctcg ccagggttacg gacagtggtc gcgtagcgaa
 120
 cagatcgaca gtgtgactgt gacgcgagtc agacacttcg tcccgcggcg tcccacggcg
 180
 attcttcgag cgggtgtctga ggtgacgttc gggttgcgtc tctgcgccgt ccgttggcga
 240
 agcaccgcgg cgattgtggc tgtgtcgccg gccttgctct cgacgcggtc gcgcgggctc
 300
 tgcgctgac tcccacagca taccc
 325

<210> 2168
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2168
 Thr Gly Ala Val Cys Glu Gly Leu Val Thr Pro Asp Arg Glu Val His
 1 5 10 15
 Ala Val Thr Ala His Pro His Tyr Pro Asp Trp Lys Ile Ser Pro Gly
 20 25 30
 Tyr Gly Gln Trp Ser Arg Ser Glu Gln Ile Asp Ser Val Thr Val Thr
 35 40 45
 Arg Val Arg His Phe Val Pro Arg Arg Pro Thr Ala Ile Leu Arg Ala
 50 55 60
 Val Ser Glu Val Thr Phe Gly Leu Arg Leu Cys Ala Val Arg Trp Arg
 65 70 75 80
 Ser Thr Ala Ala Ile Val Ala Val Ser Pro Ala Leu Leu Ser Thr Arg
 85 90 95
 Ser Arg Gly Ser Cys Ala Asp Leu Pro Gln His Thr
 100 105

<210> 2169
 <211> 309
 <212> DNA
 <213> Homo sapiens

<400> 2169
 gaggacgcct acgtgctcat caccagggc aagatctcgg cgatcgccga cgtcctgccg
 60
 atcctggaga aggtcgtaa ggccggcaag ccgctgctcg tcatcgccga ggacatcgac
 120
 ggggaggccc tgtccaccct cgtcgtcaat aagatccggc gtaccttcag ctcggtggca
 180
 gtcaaggcgc ccggcttcgg tgaccgccgc aaggcaatgc tgcaggacat cgccaccctc
 240
 accggtggtc aggtcgtcgc tcccagaggt gggtcaagc tgcaccaggt gggcctcgag
 300
 gttcagggc
 309

<210> 2170
 <211> 103
 <212> PRT
 <213> Homo sapiens

<400> 2170
 Glu Asp Ala Tyr Val Leu Ile Thr Gln Gly Lys Ile Ser Ala Ile Ala
 1 5 10 15
 Asp Val Leu Pro Ile Leu Glu Lys Val Val Lys Ala Gly Lys Pro Leu
 20 25 30
 Leu Val Ile Ala Glu Asp Ile Asp Gly Glu Ala Leu Ser Thr Leu Val
 35 40 45
 Val Asn Lys Ile Arg Gly Thr Phe Ser Ser Val Ala Val Lys Ala Pro


```

      50              55              60
Gly Phe Gly Asp Arg Arg Lys Ala Met Leu Gln Asp Ile Ala Thr Leu
65              70              75              80
Thr Gly Gly Gln Val Val Ala Pro Glu Val Gly Leu Lys Leu Asp Gln
      85              90              95
Val Gly Leu Glu Val Gln Gly
      100

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<210> 2171

<211> 518

<212> DNA

<213> Homo sapiens

<400> 2171

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cgcgtaatgt gtattaaggt ccttggtggc tgcgcatgcc gttatgcagc aatcgggtgat
60
atcatcaaag ttccagtga ggaagcaatt cctcgcggaa aaattaaaaa aggtaatggt
120
cattcagctg tggtagtgcg taccagaaaa ggtgtacgtc gtcccgatgg ttctgttatt
180
cgttttgatc gcaacgcagc ggttatcttg aatgcaaaca accagccagt cggtagacgt
240
atctttggcc ctgtaaccgc tgagcttcga aatgaaaatt tcatgaagat tgtttcactg
300
gcgccagaag tactgttaagg aaccgaaaat ggcagcaaaa ataaaacgtg acgatgaagt
360
aattgttatt gccggtaaag ataaaggtaa aactgggaaa gtttctcaag ttttaactaa
420
cggtaaagta attattgaag gtgtaaatgt tcaaaagaaa caccaaaaac caaacctca
480
agcgggcgtg gaaggcggaa tcattgaaca gaatgcat
518

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<210> 2172

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2172

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Arg Val Met Cys Ile Lys Val Leu Gly Gly Ser His Arg Arg Tyr Ala
1              5              10              15
Ala Ile Gly Asp Ile Ile Lys Val Ser Val Lys Glu Ala Ile Pro Arg
      20              25              30
Gly Lys Ile Lys Lys Gly Asn Val His Ser Ala Val Val Val Arg Thr
      35              40              45
Arg Lys Gly Val Arg Arg Pro Asp Gly Ser Val Ile Arg Phe Asp Arg
      50              55              60
Asn Ala Ala Val Ile Leu Asn Ala Asn Asn Gln Pro Val Gly Thr Arg
65              70              75              80
Ile Phe Gly Pro Val Thr Arg Glu Leu Arg Asn Glu Asn Phe Met Lys
      85              90              95
Ile Val Ser Leu Ala Pro Glu Val Leu
      100              105

```

<210> 2173
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2173
 nntggggaag aaatgccggt gcatgcactt tgtgcagcat taggtgcagg ggtgatgcag
 60
 cgggcgcgtg ccttttgctg cgggggttctg agcattcatc tggatgcagc attttgcagc
 120
 gcattttctg taccctctgc atgcgtttct ccccatgcac acacattatc gcctttgcac
 180
 ccgcagggac gcatggaata cctcgtgaaa tggaagggat ggtcgcagaa gtacagcaca
 240
 tgggaaccgg aggaaaacat cctggatgct cgcttgctcg cagcctttga ggaaagggaa
 300
 agagagatgg agctctatgg ccccaaaaag cgtggacca agcccaaac ctctctctc
 360
 aaagcgcagg ccaaggcaaa ggccaaaact tacgagtttc gaagtgactc agccaggggc
 420
 atccggatcc cctaccctgg ccgctcgccc caggacctgg cctccacttc ccggg
 475

<210> 2174
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2174
 Xaa Gly Glu Glu Met Pro Val His Ala Leu Cys Ala Ala Leu Gly Ala
 1 5 10 15
 Gly Val Met Gln Arg Ala Arg Ala Phe Cys Gly Gly Val Ser Ser Ile
 20 25 30
 His Leu Val His Ala Phe Ser His Ala Phe Leu Val Ser Ser Ser Cys
 35 40 45
 Val Ser Pro His Ala His Thr Leu Ser Pro Leu His Pro Gln Gly Arg
 50 55 60
 Met Glu Tyr Leu Val Lys Trp Lys Gly Trp Ser Gln Lys Tyr Ser Thr
 65 70 75 80
 Trp Glu Pro Glu Glu Asn Ile Leu Asp Ala Arg Leu Leu Ala Ala Phe
 85 90 95
 Glu Glu Arg Glu Arg Glu Met Glu Leu Tyr Gly Pro Lys Lys Arg Gly
 100 105 110
 Pro Lys Pro Lys Thr Phe Leu Leu Lys Ala Gln Ala Lys Ala Lys Ala
 115 120 125
 Lys Thr Tyr Glu Phe Arg Ser Asp Ser Ala Arg Gly Ile Arg Ile Pro
 130 135 140
 Tyr Pro Gly Arg Ser Pro Gln Asp Leu Ala Ser Thr Ser Arg
 145 150 155

<210> 2175
 <211> 462
 <212> DNA
 <213> Homo sapiens

<400> 2175

cgcgacaccc tctttggtgg ggccttctt tctccgaatt cgcgaaccct ccagactctg
 60
 gccacaggagg ttgtcgagcg tggagccgat atcggcattg ccactgatgg tgacgcagac
 120
 cgcctcggta tcattgatga ccaggggcat ttcttgcata ccaaccagat cctcgtattg
 180
 ctgtacacct accttctgga ggacaaggga tggcaggtgc cctgcgtgcg taacctcgcg
 240
 acgacccacc tgcttgaccg tgtcgccgag gccacgggc agacctgtta cgaggtagcg
 300
 gtcggattta agtgggtgtc gtccaagatg gccgagacca acgccgtcat cgggtggtgag
 360
 tcctccggtg gtttgaccgt ccaggggcat attgcaggca aggatgggtgt ctatgctggc
 420
 accctgctgg tggaaatgat cgccaagcgg ggtaagaagc tt
 462

<210> 2176

<211> 154

<212> PRT

<213> Homo sapiens

<400> 2176

Arg	Asp	Thr	Leu	Phe	Gly	Gly	Arg	Leu	Pro	Ser	Pro	Asn	Ser	Arg	Thr
1				5					10					15	
Leu	Gln	Thr	Leu	Ala	Gln	Glu	Val	Val	Glu	Arg	Gly	Ala	Asp	Ile	Gly
			20					25					30		
Ile	Ala	Thr	Asp	Gly	Asp	Ala	Asp	Arg	Leu	Gly	Ile	Ile	Asp	Asp	Gln
		35					40					45			
Gly	His	Phe	Leu	His	Pro	Asn	Gln	Ile	Leu	Val	Leu	Leu	Tyr	Thr	Tyr
	50					55					60				
Leu	Leu	Glu	Asp	Lys	Gly	Trp	Gln	Val	Pro	Cys	Val	Arg	Asn	Leu	Ala
65					70					75				80	
Thr	Thr	His	Leu	Leu	Asp	Arg	Val	Ala	Glu	Ala	His	Gly	Gln	Thr	Cys
			85					90						95	
Tyr	Glu	Val	Pro	Val	Gly	Phe	Lys	Trp	Val	Ser	Ser	Lys	Met	Ala	Glu
		100						105					110		
Thr	Asn	Ala	Val	Ile	Gly	Gly	Glu	Ser	Ser	Gly	Gly	Leu	Thr	Val	Gln
	115						120					125			
Gly	His	Ile	Ala	Gly	Lys	Asp	Gly	Val	Tyr	Ala	Gly	Thr	Leu	Leu	Val
	130					135					140				
Glu	Met	Ile	Ala	Lys	Arg	Gly	Lys	Lys	Leu						
145						150									

<210> 2177

<211> 478

<212> DNA

<213> Homo sapiens

<400> 2177

ctcgagaatc atgacggcga cgacgtgact atctccaccc gtgtgcctcg tgacggcggg
 60

accttggact cgattgtcgg cgtgctggcc ggggcatcct ggtatcagcg ggagatccac
 120
 gacttttttg gtgtgaggtt tgtcggccct ggggcagatg atcgtgccct ccttgtccac
 180
 gatgcaccga aaccgcccct gcgcaaggaa gctgtgttgg cgcagcgagc tgacaccgtg
 240
 tggccgggtg cggctgacca ggctggctcg aagtcgcgga gtcgacgtct gccggtcggc
 300
 gttcctgacc ctgagacgtg gggcggtatc aaagacggcg aggatattcc ggatgccgag
 360
 gtcacgcggg ccatgtctgg cggcgccccg cgatcagctg cccgtcgaat ggcaagcacg
 420
 gcgtcaggca ggcaggcatg agacattcga ctatcaacct tgacgtcgac gcgtgcac
 478

<210> 2178

<211> 146

<212> PRT

<213> Homo sapiens

<400> 2178

Leu	Glu	Asn	His	Asp	Gly	Asp	Asp	Val	Thr	Ile	Ser	Thr	Arg	Val	Pro
1				5				10						15	
Arg	Asp	Gly	Gly	Thr	Leu	Asp	Ser	Ile	Val	Gly	Val	Leu	Ala	Gly	Ala
		20						25					30		
Ser	Trp	Tyr	Gln	Arg	Glu	Ile	His	Asp	Phe	Phe	Gly	Val	Arg	Phe	Val
		35					40					45			
Gly	Pro	Gly	Ala	Asp	Asp	Arg	Ala	Leu	Leu	Val	His	Asp	Ala	Pro	Lys
		50				55					60				
Pro	Pro	Leu	Arg	Lys	Glu	Ala	Val	Leu	Ala	Gln	Arg	Ala	Asp	Thr	Val
				70						75				80	
Trp	Pro	Gly	Ala	Ala	Asp	Gln	Ala	Gly	Ser	Lys	Ser	Ala	Ser	Arg	Arg
				85					90					95	
Leu	Pro	Val	Gly	Val	Pro	Asp	Pro	Glu	Thr	Trp	Arg	Arg	Ile	Lys	Asp
			100					105					110		
Gly	Glu	Asp	Ile	Pro	Asp	Ala	Glu	Val	Ile	Ala	Ala	Met	Ser	Gly	Arg
		115				120						125			
Arg	Pro	Arg	Ser	Ala	Ala	Arg	Arg	Met	Ala	Ser	Thr	Ala	Ser	Gly	Arg
		130				135						140			
Gln	Ala														
145															

<210> 2179

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2179

gtgcacttcc gaggcgctgc attaacgggg ccggcgcggt gggcgcacac
 60
 aagacgtcga tgctgcagga tctggacnrc gaccgcgcga tggagatcga cccgctcgtc
 120
 tccgtcgttc aggagatggg acgcctggcc aacgtgccga cggccacgct cgatgtcgtg
 180

ctcccactga tcaagcaacg tgaattcatg acgaagccgg atgccgtggc ggccgcgcag
 240
 gaacgtctgg ctaaagcggc ataaaccagc cgccgaaacc agcggcataa cgcggn
 296

<210> 2180
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 2180
 Val His Phe Arg Val Asp Val Glu Arg Arg Ile Asn Gly Ala Gly Ala
 1 5 10 15
 Val Gly Ala His Lys Thr Ser Met Leu Gln Asp Leu Asp Xaa Asp Arg
 20 25 30
 Ala Met Glu Ile Asp Pro Leu Val Ser Val Val Gln Glu Met Gly Arg
 35 40 45
 Leu Ala Asn Val Pro Thr Pro Thr Leu Asp Val Val Leu Pro Leu Ile
 50 55 60
 Lys Gln Arg Glu Phe Met Thr Lys Pro Asp Ala Val Ala Ala Ala Gln
 65 70 75 80
 Glu Arg Leu Ala Lys Ala Ala
 85

<210> 2181
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2181
 ngcgcgcgcg gatggatcat agtctggctc gatgcatcac gtgcgcgcgc ggcgcgcgctg
 60
 tcgattcccc acggcatgat cgcggcactc gaccgtaccg gcaaggcgca aacgcacctc
 120
 acgtctggcat cgccggaagc ggggtgtcgtc agcgaactga acgtgcgcga cgggtgcgatg
 180
 gtcgcgcgcg ggcagacgct cgcaagatt tcgggcctct cgaagctctg gctgatcgtc
 240
 gagattccgg aagcgctcgc gctcgatgcg cgtccgggca tgaccgtcga cgcgacgttc
 300
 tcgggcgatc cgacgcagca tttcaccggg cgtatccgcg agatcctgcc gggcatcacc
 360
 accagtagcc gcacgttca ggcgcgc
 387

<210> 2182
 <211> 129
 <212> PRT
 <213> Homo sapiens

<400> 2182
 Xaa Ala Pro Gly Trp Ile Ile Val Trp Leu Asp Ala Ser Arg Ala Arg
 1 5 10 15
 Met Arg Ala Leu Ser Ile Pro Asp Gly Met Ile Ala Ala Leu Asp Arg

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      20      25      30
Thr Gly Lys Ala Gln Thr His Leu Thr Leu Ala Ser Pro Glu Ala Gly
      35      40      45
Val Val Ser Glu Leu Asn Val Arg Asp Gly Ala Met Val Ala Pro Gly
      50      55      60
Gln Thr Leu Ala Lys Ile Ser Gly Leu Ser Lys Leu Trp Leu Ile Val
65      70      75      80
Glu Ile Pro Glu Ala Leu Ala Leu Asp Ala Arg Pro Gly Met Thr Val
      85      90      95
Asp Ala Thr Phe Ser Gly Asp Pro Thr Gln His Phe Thr Gly Arg Ile
      100      105      110
Arg Glu Ile Leu Pro Gly Ile Thr Thr Ser Ser Arg Thr Leu Gln Ala
      115      120      125
Arg

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<210> 2183

<211> 310

<212> DNA

<213> Homo sapiens

<400> 2183

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aagcttgaaa aacaaatttg tgcacagtct gataacccaa aaatgactga tggattggct
60
ctgcattttc caagcagggg ggggtcgggc atggagaatg aaacattctg agaaaagact
120
taaagtgtga aacttttggt tcaagagggt attctaggag atacaagaaa tatctcctgg
180
gggcatacaa agggaataac actgtaatct tgagtgatgt atggttccat tgcccagga
240
atagggatga aaaccataaa ctcttttggg tgggtattaa cttatcantc aaagttacca
300
tanataatgg
310

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<210> 2184

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2184

```

Met Val Thr Leu Xaa Asp Lys Leu Ile Pro Thr Gln Arg Ser Leu Trp
1      5      10      15
Phe Ser Ser Leu Phe Leu Gly Gln Trp Asn His Thr Ser Leu Lys Ile
      20      25      30
Thr Val Leu Phe Pro Leu Asp Ala Pro Arg Arg Tyr Phe Leu Tyr Leu
      35      40      45
Leu Glu Tyr Pro Leu Glu Pro Lys Val Ser Thr Phe Lys Ser Phe Leu
      50      55      60
Arg Met Phe His Ser Pro Cys Pro Thr Pro Pro Cys Leu Glu Asn Ala
65      70      75      80
Glu Pro Ile His Gln Ser Phe Leu Gly Tyr Gln Thr Val His Lys Phe
      85      90      95
Val Phe Gln Ala

```

100

<210> 2185

<211> 723

<212> DNA

<213> Homo sapiens

<400> 2185

```

ngaatatcca tgcagcagct cgtcgacaat tttgacgggtg ccatccctga cgatcttgac
60
tctcttgtga ccctgcccgagg agtcgggtcgt aagaccgcca atgttgtttt aggtaatgcc
120
ttcggcatcc ccggaatcac cccggacacc cacgtcatgc gggatatctcg acgtctgggc
180
tggaccgatg cgactacccc cgccaagggtg gaaaccgacc tggctgagct ttttgaccgc
240
tctgaatggg tgatgttgtg tcaccgcctc atctggcacg ggcggcggcg ctgtcactcg
300
cggcgctcctg cctgcgggggt atgcccgggtt gccgagtggg gcccgctcctt cggggaaggc
360
ccaacggatc ccgaggaggc cgccacgtta gtccgggagc cgcgtcgatg agggggatga
420
acgttttctg cgcggtgatg gccgccttga tgtttgctgg ctgcggggga gatgcgggca
480
tagctcatca gcgtgaaaat gccggaatac cgggggtgctc gcatttgccg tcggggccga
540
ttgcgaaaag ttccggggccg gccacagagg gccggcccat gcccgatcac ggcttgcaat
600
gccttggtga ggggccgacg atctccatgt ctccggcgac atcgaggggc gtgaccgtcg
660
tgacgatctg ggcgtcgtgg tgcgacatgt gtcgtagtga ggctccgctc attgcgaacg
720
cgt
723

```

<210> 2186

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2186

```

Xaa Ile Ser Met Gln Gln Leu Val Asp Asn Phe Asp Gly Ala Ile Pro
1           5           10           15
Asp Asp Leu Asp Ser Leu Val Thr Leu Pro Gly Val Gly Arg Lys Thr
20           25           30
Ala Asn Val Val Leu Gly Asn Ala Phe Gly Ile Pro Gly Ile Thr Pro
35           40           45
Asp Thr His Val Met Arg Val Ser Arg Arg Leu Gly Trp Thr Asp Ala
50           55           60
Thr Thr Pro Ala Lys Val Glu Thr Asp Leu Ala Glu Leu Phe Asp Pro
65           70           75           80
Ser Glu Trp Val Met Leu Cys His Arg Leu Ile Trp His Gly Arg Arg
85           90           95
Arg Cys His Ser Arg Arg Pro Ala Cys Gly Val Cys Pro Val Ala Glu

```

	100		105		110										
Trp	Cys	Pro	Ser	Phe	Gly	Glu	Gly	Pro	Thr	Asp	Pro	Glu	Glu	Ala	Ala
	115				120				125						
Thr	Leu	Val	Arg	Glu	Pro	Arg	Arg								
	130				135										

<210> 2187

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2187

```

nnacgcgtga aggatgcgcc ccggtcgacc ggccatccgt cttgcctcgc aggcattccag
60
cccgccatat gctgcaaccg caacaccgct ttgccgtcgc atggcatctc cactccggat
120
cgcattgatc caccgagggt atcggcgcgga aagaagttgc cggggcaaaa tcccggcgag
180
gaaagcccga tggagtggaa gacgctgctc aacgacaccc gcttcggagg ggtcgccagc
240
ctcgatggga cgcgcggacg gtcggagttc cagaaggacc acgaccggat catcttctcc
300
gaagccttcc gcaagctggg ccgcaagacc caggtgcacc cg
342

```

<210> 2188

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2188

Met	Glu	Trp	Lys	Thr	Leu	Leu	Asn	Asp	Thr	Arg	Phe	Gly	Gly	Val	Ala
1			5						10					15	
Ser	Leu	Asp	Gly	Thr	Arg	Gly	Arg	Ser	Glu	Phe	Gln	Lys	Asp	His	Asp
		20					25					30			
Arg	Ile	Ile	Phe	Ser	Glu	Ala	Phe	Arg	Lys	Leu	Gly	Arg	Lys	Thr	Gln
	35					40					45				
Val	His	Pro													
	50														

<210> 2189

<211> 1412

<212> DNA

<213> Homo sapiens

<400> 2189

```

ntcgcttcat ggtgcgcaat tacgacaacg ccaagtctca gaatgccgag gcttacaccg
60
cgttcttcca cgcgatgcta gatgccgggg tcaacctgcc gccatcgtgc tttgaggcct
120
ggttcctctc ggacgctcac gacgacgaag ctttcgaggt tttccgcgcc gccctgccga
180
gggctgcccc ggcggtgcc caggtgatca gtgcctgaca cggggctgac ttcgcaggtc
240

```


atcgaggcaa tctgtgcctg gttagacgcc aacggacgcg atctgccgtg gcgcgaccc
 300
 ggcacctccg cgtggggcgt gcttgtagc gaggtcatga gccaacagac cccgatgtcc
 360
 cgggtgatcg ggccgtggca cgagtggatg aaccgctggc ccaccctga tgatttggcg
 420
 gaggaggact ctggggaagc ggttgccgcg tgggggcgcc tgggttacc gcgtcgggccc
 480
 ttacgcctgc attcctgtgc cgtcacgac gccaccgagc acgacggggg tgtgcccac
 540
 agtgacgacg agctcgtcgc cctcccggtt attggcgact acaccgcgag cgcagtcgtc
 600
 tcttttgcgt ttggcgcccg cgccacagt cttgacacca atgtacgtcg cctcatcgct
 660
 agagcagagt ctgggatcgc aaactgtcca acctcggatga cgagggctga gcgggtagtc
 720
 gccgacgcgt tggttcccg cgaagacgtc cgagcggcca agtgggcggt gccgtcgatg
 780
 gaattggggg cactggtatg cacggcgcg tctccgcagt gtgaggtctg cccgatccgg
 840
 gatggctgca ggtgggtgat cgacggtagg ccggacaatg ccccgcccg tcgaggacag
 900
 ccatggaagg gcacggatcg ccagtgcgc ggcgtgatta tggacgtggt gcgcaacagc
 960
 cctcacgggg tgaaggtcca gatggctctt tccgcctggc ccgagctcga tcaggcatca
 1020
 aggtgcctgg aatccttact cgatgacggt ttagtgcacc gacgaggtaa cttatttagc
 1080
 ctgtgacctg agaaattctt ggccccgacc acccaaacag accgagtcca gcagtgatgc
 1140
 cgctgggtta tccttagagg cggtcctcaa attggatcag ccaaaccacg tcaccgatca
 1200
 agacaccatg agcacaacac ccaaacagcc gcgcacggcg acagctgcc gacgccgaca
 1260
 cattgtcgac catctgcgtt ctttggggca ctcggagtcc atcggagatc tttaccaact
 1320
 gttcgggtgtc tctacatcga cgattcgccg cgatgtcgat gccctctcgg atgaatccaa
 1380
 gatctggaag atttccgggg gagacgtcat ga
 1412

<210> 2190

<211> 292

<212> PRT

<213> Homo sapiens

<400> 2190

Ser	Val	Pro	Asp	Thr	Gly	Leu	Thr	Ser	Gln	Val	Ile	Glu	Ala	Ile	Cys
1				5				10						15	
Ala	Trp	Phe	Asp	Ala	Asn	Gly	Arg	Asp	Leu	Pro	Trp	Arg	Arg	Pro	Gly
			20				25						30		
Thr	Ser	Ala	Trp	Gly	Val	Leu	Val	Ser	Glu	Val	Met	Ser	Gln	Gln	Thr
		35				40					45				
Pro	Met	Ser	Arg	Val	Ile	Gly	Pro	Trp	His	Glu	Trp	Met	Asn	Arg	Trp

50 55 60
 Pro Thr Pro Asp Asp Leu Ala Glu Glu Asp Ser Gly Glu Ala Val Ala
 65 70 75 80
 Ala Trp Gly Arg Leu Gly Tyr Pro Arg Arg Ala Leu Arg Leu His Ser
 85 90 95
 Cys Ala Val Thr Ile Ala Thr Glu His Asp Gly Gly Val Pro Asn Ser
 100 105 110
 Asp Asp Glu Leu Val Ala Leu Pro Gly Ile Gly Asp Tyr Thr Ala Ser
 115 120 125
 Ala Val Val Ser Phe Ala Phe Gly Gly Arg Ala Thr Val Leu Asp Thr
 130 135 140
 Asn Val Arg Arg Leu Ile Ala Arg Ala Glu Ser Gly Ile Ala Asn Cys
 145 150 155 160
 Pro Thr Ser Val Thr Arg Ala Glu Arg Val Val Ala Asp Ala Leu Val
 165 170 175
 Pro Asp Glu Asp Val Arg Ala Ala Lys Trp Ala Val Ala Ser Met Glu
 180 185 190
 Leu Gly Ala Leu Val Cys Thr Ala Arg Ser Pro Gln Cys Glu Val Cys
 195 200 205
 Pro Ile Arg Asp Gly Cys Arg Trp Val Ile Asp Gly Arg Pro Asp Asn
 210 215 220
 Ala Pro Ala Arg Arg Gly Gln Pro Trp Lys Gly Thr Asp Arg Gln Cys
 225 230 235 240
 Arg Gly Val Ile Met Asp Val Val Arg Asn Ser Pro His Gly Val Lys
 245 250 255
 Val Gln Met Ala Leu Ser Ala Trp Pro Glu Leu Asp Gln Ala Ser Arg
 260 265 270
 Cys Leu Glu Ser Leu Leu Asp Asp Gly Leu Val His Arg Arg Gly Asn
 275 280 285
 Leu Ile Ser Leu
 290

<210> 2191

<211> 502

<212> DNA

<213> Homo sapiens

<400> 2191

nnacgcgctcg agaatctcta ctctgccccg aacaacgtcc ggcttcgtca ggctcacgat
 60
 gactcccttg acgacgacac catttcgggg ggtagccac attggtgctg cctcatggac
 120
 tacattgaat cccgttcaat cctgaacggc gttcaggacg tctccagtct cggaaggacc
 180
 agagtattgc tgaatctagc cgacatgacc gaacgcggcc tgagggggga gtccattacc
 240
 cgcgaggagg cctcagat tcttcgcagc agtgatgatg agctcatgtc aatcatcgcc
 300
 gccgccgga aagtgcgtcg ccactttttc gataaccggg ttcgcctcaa ctacctggtc
 360
 aacctcaagt ccggcctgtg tcccgaagac tgctcctatt gctcgcagcg tctgggatcg
 420
 cgtgccgaga tcacgaaata ctctggggc gatccgcaga aggtacacga cgccgtcgag
 480

gctgggattg ccggtgggtgc ac
502

<210> 2192
<211> 104
<212> PRT
<213> Homo sapiens

<400> 2192
Leu Asn Leu Ala Asp Met Thr Glu Arg Gly Leu Arg Gly Glu Ser Ile
1 5 10 15
Thr Arg Glu Glu Ala Leu Glu Ile Leu Arg Ser Ser Asp Asp Glu Leu
20 25 30
Met Ser Ile Ile Ala Ala Ala Gly Lys Val Arg Arg His Phe Phe Asp
35 40 45
Asn Arg Val Arg Leu Asn Tyr Leu Val Asn Leu Lys Ser Gly Leu Cys
50 55 60
Pro Glu Asp Cys Ser Tyr Cys Ser Gln Arg Leu Gly Ser Arg Ala Glu
65 70 75 80
Ile Thr Lys Tyr Ser Trp Ala Asp Pro Gln Lys Val His Asp Ala Val
85 90 95
Glu Ala Gly Ile Ala Gly Gly Ala
100

<210> 2193
<211> 321
<212> DNA
<213> Homo sapiens

<400> 2193
ccatggggaa tgcagagcac ggacagtcac acagactgtc ctctctggcc ttctggaccc
60
aacatactcc tcttgccaac tgggtattac tggaccttac tgggccttac tggacccaac
120
atactcctct tgccaactgg ggatttaaaa attttaaaag cccctttatc tccctccaca
180
agtcattgtac tgccaacagg gacacactgt tttctttgga aacctgtctg tgtgcccaga
240
cagaggtccc actgccttgg gacagctccc ttgcctanag gggaaggagg gtgtgtgtgc
300
tgtgtgtgtt taggttgggg a
321

<210> 2194
<211> 106
<212> PRT
<213> Homo sapiens

<400> 2194
Met Gly Asn Ala Glu His Gly Gln Ser His Arg Leu Ser Ser Leu Ala
1 5 10 15
Phe Trp Thr Gln His Thr Pro Leu Ala Asn Trp Val Leu Leu Asp Leu
20 25 30
Thr Gly Pro Tyr Trp Thr Gln His Thr Pro Leu Ala Asn Trp Gly Phe

	35					40					45								
Lys	Asn	Phe	Lys	Ser	Pro	Phe	Ile	Ser	Leu	His	Lys	Ser	Cys	Thr	Ala				
	50					55					60								
Asn	Arg	Asp	Thr	Leu	Phe	Ser	Leu	Glu	Thr	Leu	Leu	Cys	Ala	Gln	Thr				
65					70					75					80				
Glu	Val	Pro	Leu	Pro	Trp	Asp	Ser	Ser	Leu	Ala	Xaa	Arg	Gly	Arg	Arg				
				85					90					95					
Val	Cys	Val	Leu	Cys	Val	Phe	Arg	Leu	Gly										
			100					105											

<210> 2195

<211> 504

<212> DNA

<213> Homo sapiens

<400> 2195

nacgcgtctc cctacatcaa tgcccaccgc gattgcacct ttgttgtcat gtcacctggc
 60
 gacggtgtgg cacaccccaa ctttggaat atcgccacg acctggtgct gttgcacagc
 120
 ctgggtgtgc gtctggtact ggtccacggt tcgcgcccgc agatcgacag ccgccttgag
 180
 gcacgaggcc tgggtgccgta ttaccacaag ggcattgcgtg tcaccgatgc atcaacgctc
 240
 gaatgcgtga tcgatgctgt cgggcaactg cgcattgcga ttgaagcgcg cttgtcgatg
 300
 gacatggcgt cttegccaat gcagggttcg cgtctgcgcg tagccagcgg caacctggtc
 360
 actgcgcggc cgatcggcgt gctcgacggt gtggattttc accataccgg cgaagtgcgc
 420
 cgggtggacc gcaagggcat caaccgcctg ctcgatgagc gctcgattgt gctgctgtcg
 480
 cccttgggtt actcgccac cggc
 504

<210> 2196

<211> 168

<212> PRT

<213> Homo sapiens

<400> 2196

Xaa	Ala	Ser	Pro	Tyr	Ile	Asn	Ala	His	Arg	Asp	Cys	Thr	Phe	Val	Val				
1				5					10					15					
Met	Leu	Pro	Gly	Asp	Gly	Val	Ala	His	Pro	Asn	Phe	Gly	Asn	Ile	Val				
			20					25				30							
His	Asp	Leu	Val	Leu	Leu	His	Ser	Leu	Gly	Val	Arg	Leu	Val	Leu	Val				
		35				40				45									
His	Gly	Ser	Arg	Pro	Gln	Ile	Asp	Ser	Arg	Leu	Glu	Ala	Arg	Gly	Leu				
50					55					60									
Val	Pro	Tyr	Tyr	His	Lys	Gly	Met	Arg	Val	Thr	Asp	Ala	Ser	Thr	Leu				
65				70					75						80				
Glu	Cys	Val	Ile	Asp	Ala	Val	Gly	Gln	Leu	Arg	Ile	Ala	Ile	Glu	Ala				
			85					90						95					
Arg	Leu	Ser	Met	Asp	Met	Ala	Ser	Ser	Pro	Met	Gln	Gly	Ser	Arg	Leu				

```

                100                105                110
Arg Val Ala Ser Gly Asn Leu Val Thr Ala Arg Pro Ile Gly Val Leu
                115                120                125
Asp Gly Val Asp Phe His His Thr Gly Glu Val Arg Arg Val Asp Arg
                130                135                140
Lys Gly Ile Asn Arg Leu Leu Asp Glu Arg Ser Ile Val Leu Leu Ser
145                150                155                160
Pro Leu Gly Tyr Ser Pro Thr Gly
                165

```

<210> 2197

<211> 351

<212> DNA

<213> Homo sapiens

<400> 2197

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acaagtcctg cgacgattcg ctttccggag gcgggcccag gaatggtaat gaaacccgag
60
ttatggggcc ctgcgctcga cgagattgcc gcgggaaaac gtgccggagg ggctgaacag
120
ttagattccg cagtgcagca catccacggt gctactcacg ataaactgtc cgggtgtgtt
180
ccgaaacgct acgatggtcg ggatgtcttg gcaggcgagg acccgaatgc accgttgctg
240
cttgtgccta gcccggtgg tgcagtgttt agtcaaaata aggcacaagc ctggtccaat
300
gaagaccaca ttgtttttgc ctgtgggcgc tatgaaggta ttgatcaacg c
351

```

<210> 2198

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2198

```

Thr Ser Pro Ser Thr Ile Arg Phe Pro Glu Ala Gly Pro Gly Met Val
1                5                10                15
Met Lys Pro Glu Leu Trp Gly Pro Ala Leu Asp Glu Ile Ala Ala Gly
                20                25                30
Lys Arg Ala Gly Gly Ala Glu Gln Leu Asp Ser Ala Val Gln His Ile
                35                40                45
His Gly Ala Thr His Asp Lys Leu Ser Gly Ala Val Pro Lys Arg Tyr
                50                55                60
Asp Gly Arg Asp Val Leu Ala Gly Glu Asp Pro Asn Ala Pro Leu Leu
65                70                75                80
Leu Val Pro Ser Pro Ala Gly Ala Val Phe Ser Gln Asn Lys Ala Gln
                85                90                95
Ala Trp Ser Asn Glu Asp His Ile Val Phe Ala Cys Gly Arg Tyr Glu
                100                105                110
Gly Ile Asp Gln Arg
                115

```

<210> 2199

<211> 457

<212> DNA

<213> Homo sapiens

<400> 2199

agacgccggc cgccaagatc tgcattcccta ggccacgcta agaccctggg gaagagcgca
 60
 ggagcccggg agaagggctg gaaggagggg actggacgtg cggagaattc cccctaaaa
 120
 ggcagaagcc cccgccccca ccctccgagc tccgttcggg cagagcgctt gcctgcctgc
 180
 cgttgctggg ggcgcccacc tcgcccagcc atgccaggcc cggccaccga cgcggggaag
 240
 atccctttct ggcagcccaa ggaagaaatc cgtgccgggc tcgaaagctc tgagggcggc
 300
 ggcggcccg agaggccagg cgcgcgcggg cagcggcaga acatcgtctg gaggaatgtc
 360
 gtctgatga gcttgctcca cttggggggc gtgtactccc tgggtgctcat ccccaaagcc
 420
 aagccactca ctctgctctg gggtaagtcc cgccggc
 457

<210> 2200

<211> 152

<212> PRT

<213> Homo sapiens

<400> 2200

Arg	Arg	Arg	Pro	Pro	Arg	Ser	Ala	Ser	Leu	Gly	His	Ala	Lys	Thr	Leu
1				5					10					15	
Gly	Lys	Ser	Ala	Gly	Ala	Arg	Glu	Lys	Gly	Trp	Lys	Glu	Gly	Thr	Gly
			20					25					30		
Arg	Ala	Glu	Asn	Ser	Pro	Leu	Lys	Gly	Arg	Ser	Pro	Arg	Pro	His	Pro
			35				40					45			
Pro	Ser	Ser	Val	Arg	Ala	Glu	Arg	Leu	Pro	Ala	Cys	Arg	Cys	Trp	Gly
			50			55					60				
Arg	Pro	Pro	Arg	Pro	Ala	Met	Pro	Gly	Pro	Ala	Thr	Asp	Ala	Gly	Lys
65					70					75				80	
Ile	Pro	Phe	Cys	Asp	Ala	Lys	Glu	Glu	Ile	Arg	Ala	Gly	Leu	Glu	Ser
			85						90					95	
Ser	Glu	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Pro	Gly	Ala	Arg	Gly	Gln	Arg
			100					105					110		
Gln	Asn	Ile	Val	Trp	Arg	Asn	Val	Val	Leu	Met	Ser	Leu	Leu	His	Leu
			115				120					125			
Gly	Ala	Val	Tyr	Ser	Leu	Val	Leu	Ile	Pro	Lys	Ala	Lys	Pro	Leu	Thr
			130				135					140			
Leu	Leu	Trp	Gly	Lys	Ser	Arg	Arg								
145						150									

<210> 2201

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2201

agtactgcga tggacagcta tgctcgtggat ggtggtcgca aattacatgt ttgtggtaac
 60
 aaccctgatt gcgatgggta tgaagtcgaa gaaggcgaat tcaagatcaa gggttatgat
 120
 ggtccgacta tcccatgcga taaatgtgat ggtgagatgc agcttaaaac gggtcggtttt
 180
 ggtccatatt tcgcatgtac tagctgtgac aatactcgta aggtactcaa gagtgggtcaa
 240
 cctgctccgc cacgtgtaga cccaatcaaa atggagcatc tacgttcaac gaagcatgat
 300
 gatttccttcg tcttacgtga gggcgtgct ggttta
 336

<210> 2202

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2202

Ser	Thr	Ala	Met	Asp	Ser	Tyr	Val	Val	Asp	Gly	Gly	Arg	Lys	Leu	His
1			5					10					15		
Val	Cys	Gly	Asn	Asn	Pro	Asp	Cys	Asp	Gly	Tyr	Glu	Val	Glu	Glu	Gly
		20					25				30				
Glu	Phe	Lys	Ile	Lys	Gly	Tyr	Asp	Gly	Pro	Thr	Ile	Pro	Cys	Asp	Lys
		35				40					45				
Cys	Asp	Gly	Glu	Met	Gln	Leu	Lys	Thr	Gly	Arg	Phe	Gly	Pro	Tyr	Phe
	50					55					60				
Ala	Cys	Thr	Ser	Cys	Asp	Asn	Thr	Arg	Lys	Val	Leu	Lys	Ser	Gly	Gln
65					70					75				80	
Pro	Ala	Pro	Pro	Arg	Val	Asp	Pro	Ile	Lys	Met	Glu	His	Leu	Arg	Ser
			85					90					95		
Thr	Lys	His	Asp	Asp	Phe	Phe	Val	Leu	Arg	Glu	Gly	Ala	Ala	Gly	Leu
			100					105					110		

<210> 2203

<211> 273

<212> DNA

<213> Homo sapiens

<400> 2203

ctcgagagat gcagtcacag ccgggggtggg aagctgtgca gacagccccg gatctgggac
 60
 gtgatggaaa actcaacaga ctgggttcaga tcttggtccc gagcccagag gcaccgggga
 120
 cccccagggc tggtttctccc tggccacacc agtaccacac ttccaaatgc cctgtaggtg
 180
 accaccaggc cacacaggcc cgtctgaggg gccacaggct gtgcaccatg ggacgcaggc
 240
 ctgtccctgc ctccctccga tgtcctgatg gtg
 273

<210> 2204

<211> 88

<212> PRT

<213> Homo sapiens

<400> 2204

```

Met Gln Ser Gln Pro Gly Trp Glu Ala Val Gln Thr Ala Pro Asp Leu
 1           5           10           15
Gly Arg Asp Gly Lys Leu Asn Arg Leu Val Gln Ile Leu Ala Arg Ser
 20           25           30
Pro Glu Ala Pro Gly Thr Pro Arg Ala Val Ser Pro Trp Pro His Gln
 35           40           45
Tyr Pro Thr Ser Lys Cys Pro Val Gly Asp His Gln Ala Thr Gln Ala
 50           55           60
Arg Leu Arg Gly His Arg Leu Cys Thr Met Gly Arg Arg Pro Val Pro
 65           70           75           80
Ala Ser Leu Arg Cys Pro Asp Gly
                        85

```

<210> 2205

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2205

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gnnnnnggng nnnnactggt gtgcatggtt aaaatcctgc aagctactgg gttgccacag
 60
catctgtccc actttgtggt ctgcaaatac agcttctggg atcaacagga gccggtgatt
 120
gtcgctcctg aagtggacac ctctcctctt tccgtcagca aggagccgca ctgcatggtt
 180
gtctttgatc attgcaatga gttttctggt aacatcaccg aagactttat cgagcatctt
 240
tccgaaggag cattggcaat tgaagtatat ggacataaaa taaacgatcc ccggaaaaac
 300
cccgcctgt gggatttggg aatcatccaa gcaaagacac gtagtcttcg ggacagatgg
 360
agtgaagtgc ccaggaaatt ggaattc
 387

```

<210> 2206

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2206

```

Xaa Xaa Gly Xaa Xaa Leu Val Cys Met Val Lys Ile Leu Gln Ala Thr
 1           5           10           15
Gly Leu Pro Gln His Leu Ser His Phe Val Phe Cys Lys Tyr Ser Phe
 20           25           30
Trp Asp Gln Gln Glu Pro Val Ile Val Ala Pro Glu Val Asp Thr Ser
 35           40           45
Ser Ser Ser Val Ser Lys Glu Pro His Cys Met Val Val Phe Asp His
 50           55           60
Cys Asn Glu Phe Ser Val Asn Ile Thr Glu Asp Phe Ile Glu His Leu
 65           70           75           80
Ser Glu Gly Ala Leu Ala Ile Glu Val Tyr Gly His Lys Ile Asn Asp

```



```

<400> 2208
Ile Ser Asn Pro Glu Thr Leu Ser Asn Thr Ala Gly Phe Glu Gly Tyr
  1                      5                      10                      15
Ile Asp Leu Gly Arg Glu Leu Ser Ser Leu His Ser Leu Leu Trp Glu
                      20                      25                      30
Ala Val Ser Gln Leu Glu Gln Ser Ile Val Ser Lys Leu Gly Pro Leu
                      35                      40                      45
Pro Arg Ile Leu Arg Asp Val His Thr Ala Leu Ser Thr Pro Gly Ser
                      50                      55                      60
Gly Gln Leu Pro Gly Thr Asn Asp Leu Ala Ser Thr Pro Gly Ser Gly

```

```

65              70              75              80
Ser Ser Ser Ile Ser Ala Gly Leu Gln Lys Met Val Ile Glu Asn Asp
              85              90              95
Leu Ser Gly Leu Ile Asp Phe Thr Arg Leu Pro Ser Pro Thr Pro Glu
              100              105              110
Asn Lys Asp Leu Phe Phe Val Thr Arg Ser Ser Gly Val Gln Pro Ser
              115              120              125
Pro Ala Arg Ser Ser Ser Tyr Ser Glu Ala Asn Glu Pro Asp Leu Gln
              130              135              140
Met Ala Asn Gly Gly Lys Ser Leu Ser Met Val Asp Leu Gln Asp Ala
145              150              155              160
Arg Thr Leu Asp Gly Glu Ala Gly Ser Pro Ala Gly Pro Asp Val Leu
              165              170              175
Pro Thr Asp Gly Gln Ala Ala Ala Ala Gln Leu Val Ala Gly Trp Pro
              180              185              190
Ala Arg Ala Thr Pro Val Asn Leu Ala Gly Leu Ala Thr Val Arg Arg
              195              200              205
Ala Gly Gln Thr Pro Thr Thr Pro Gly Thr Ser Glu Gly Ala
              210              215              220

```

<210> 2209

<211> 353

<212> DNA

<213> Homo sapiens

<400> 2209

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ngggaagttg gtactagcct cccaaagcca ctctcctgag tgacattgag agcatcctat
60
agagaaggcc atgagagaga tagcactggg acagatgggtg tcagcagagg ggactccaga
120
ccacagcaga agtgaccaag ctgtagcttc cttagatggc cccaaggggtg ggaggcttca
180
cacagcagag cctgggtctg gaggcacctt ggggatgttt ttccccatta ggcccctgag
240
ctctatggaa gcacttaact gcctgttccc cgcttattct gtgtttaaac caaggaaaca
300
acatgcctgg ggtctgaaat cctggattca aatcctgact gtgttgtgtg ctt
353

```

<210> 2210

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2210

```

Met Arg Glu Ile Ala Leu Gly Gln Met Val Ser Ala Glu Gly Thr Pro
1              5              10              15
Asp His Ser Arg Ser Asp Gln Ala Val Ala Ser Leu Asp Gly Pro Lys
              20              25              30
Gly Gly Arg Leu His Thr Ala Glu Pro Gly Ser Gly Gly Thr Leu Gly
              35              40              45
Met Phe Phe Pro Ile Arg Pro Leu Ser Ser Met Glu Ala Leu Asn Cys
              50              55              60
Leu Phe Pro Ala Tyr Ser Val Phe Lys Pro Arg Lys Gln His Ala Trp

```

65 70 75
Gly Leu Lys Ser Trp Ile Gln Ile Leu Thr Val Leu Cys Ala
85 90

```
<210> 2211
<211> 493
<212> DNA
<213> Homo sapiens
```

```

<400> 2211
ctgaccacat ctccgacgat cctagacctc tgtttctgcat ctccggacacc accgactgct
60
cactgtaccc tgggactgca cagagggaaa cgattaccaa acccagagac ggggaccgga
120
aggaaggagg ggaaggggat ggatccatgt actttggggg tggagaaatg ggggacagca
180
agtctcctca acccaaatac agccccctg ggagggtcct gcccgctctc tgtggatagt
240
gagcccagct gcaagggcgg cctgccaggg acaaaccac caaaaggaaa gatgttgtag
300
aaccaaagag aggctccctg aaagaggcgt ctcccggggc ctccaagccc gggagcgccc
360
ggcggacagg gggcagtggc caagtctgtg cggaccctga ccgcctcaga gaacgagagc
420
atgcgcaaag tcatgcccac caccaagtcc agcagaggcg cgggctggag gcgaccagag
480
ctgtcatccc ggg
493

```

```
<210> 2212
<211> 126
<212> PRT
<213> Homo sapiens
```

```

<400> 2212
Met Gly Met Thr Leu Arg Met Leu Ser Phe Ser Glu Ala Val Arg Val
  1              5              10              15
Arg Thr Asp Leu Ala Thr Ala Pro Cys Pro Pro Gly Ala Pro Gly Leu
      20              25              30
Gly Gly Pro Gly Arg Arg Leu Phe Gln Gly Ala Ser Leu Trp Phe Tyr
      35              40              45
Asn Ile Phe Pro Phe Gly Gly Phe Val Pro Gly Arg Pro Pro Leu Gln
      50              55              60
Leu Gly Ser Leu Ser Thr Glu Thr Gly Gln Glu Pro Pro Arg Gly Ala
65              70              75              80
Val Phe Gly Leu Arg Arg Leu Ala Val Pro His Phe Ser Asn Pro Lys
      85              90              95
Val His Gly Ser Ile Pro Phe Pro Ser Phe Leu Pro Val Pro Val Ser
      100             105             110
Gly Phe Gly Asn Arg Phe Pro Leu Cys Ser Pro Arg Val Gln
      115             120             125

```

<210> 2213
<211> 327

<212> DNA

<213> Homo sapiens

<400> 2213

acgcgtccga ccggcagttc cggcagctgc gggaaagctg cgatgcgctc gccgagcatt
 60
 gccggtgctt cgacacactg gggttatatcg cctcaaagc acaggtctac gaaggttctg
 120
 acggaaggcc cggccaatcc gatcgcggcc tcggcgctgc gcatcatccg ggcgcgctg
 180
 tcgcagctct ggggcacgtc gctgctccgc aacggacggg cggaacagag tgtggtggag
 240
 atcgcccggg tggtcgacgc gatcacgtca cgggacgagg aagccgcca gcgtgcactg
 300
 ctcgaccaca atcgacgcgc gttggaa
 327

<210> 2214

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2214

Met	Arg	Ser	Pro	Ser	Ile	Ala	Gly	Ala	Ser	Thr	His	Trp	Val	Ile	Ser
1				5				10					15		
Pro	Ser	Lys	His	Arg	Ser	Thr	Lys	Val	Leu	Thr	Glu	Gly	Pro	Ala	Asn
			20				25					30			
Pro	Ile	Ala	Ala	Ser	Ala	Leu	Arg	Ile	Ile	Arg	Ala	Arg	Val	Ser	Gln
		35				40				45					
Leu	Trp	Gly	Thr	Ser	Leu	Leu	Arg	Asn	Gly	Arg	Ala	Glu	Gln	Ser	Val
	50					55				60					
Val	Glu	Ile	Ala	Arg	Leu	Val	Asp	Ala	Ile	Thr	Ser	Arg	Asp	Glu	Glu
65					70					75				80	
Ala	Ala	Gln	Arg	Ala	Leu	Leu	Asp	His	Asn	Arg	Ser	Ala	Leu	Glu	
			85						90					95	

<210> 2215

<211> 430

<212> DNA

<213> Homo sapiens

<400> 2215

ctggggatca tgccctacat cactgcgtcg atcatcctgc agctgctgac agtcgtgac
 60
 ccgaagctgg aaacccttaa gaaggagggc gcgtccggtc agaacaagat caccagtagc
 120
 acccggtacc tcactctcgt gcttggcctg ttgcaggcaa cggccttcgt cacgcttgcc
 180
 acctccggcc gtctattcac cnntgcagct ntgccagtcg tctactccac ctccggtcttc
 240
 gaagtcgtcg tcatgatcct gactatgacg gccggtacga ccatcgatcat gtggatgggt
 300
 gagtcacatc ccgaccgcgg tatcggaac ggtatgtcga tcatgatttt cactcagatt
 360

gcggcgcggtt tccctgactc gctgtggtct atcaaggctc ctcgaaatgg cgccgggtcag
420

gctcacgcgt
430

<210> 2216

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2216

Leu	Gly	Ile	Met	Pro	Tyr	Ile	Thr	Ala	Ser	Ile	Ile	Leu	Gln	Leu	Leu
1				5					10					15	
Thr	Val	Val	Ile	Pro	Lys	Leu	Glu	Thr	Leu	Lys	Lys	Glu	Gly	Ala	Ser
			20					25					30		
Gly	Gln	Asn	Lys	Ile	Thr	Gln	Tyr	Thr	Arg	Tyr	Leu	Thr	Leu	Val	Leu
		35					40					45			
Gly	Leu	Leu	Gln	Ala	Thr	Ala	Phe	Val	Thr	Leu	Ala	Thr	Ser	Gly	Arg
	50					55					60				
Leu	Phe	Thr	Xaa	Ala	Ala	Xaa	Pro	Val	Val	Tyr	Ser	Thr	Ser	Val	Phe
65					70					75				80	
Glu	Val	Val	Val	Met	Ile	Leu	Thr	Met	Thr	Ala	Gly	Thr	Thr	Ile	Val
				85					90					95	
Met	Trp	Met	Gly	Glu	Leu	Ile	Thr	Asp	Arg	Gly	Ile	Gly	Asn	Gly	Met
			100					105					110		
Ser	Ile	Met	Ile	Phe	Thr	Gln	Ile	Ala	Ala	Arg	Phe	Pro	Asp	Ser	Leu
		115				120						125			
Trp	Ser	Ile	Lys	Val	Ala	Arg	Asn	Gly	Ala	Gly	Gln	Ala	His	Ala	
	130					135						140			

<210> 2217

<211> 444

<212> DNA

<213> Homo sapiens

<400> 2217

accagggccg cttcgaagga cctctctcca gctatcgtga cgacgacggc gaagcgggct
60
atgacgtggc tcgatgacga cgtgggcggc gacctgttga atcaggctga ttccatggac
120
catgccctgg aggccaccgt cccaggctcg gtcaccacgc cggacgcca agtcatccag
180
acctgtgccg tgttgcgtag ccttgctcgc gtggcagtca gccagctggg ccgaaatgac
240
gaggactcta gggaaccagt cgatgcggag agagtacagg ctcaagcgnc gatgcgggag
300
gttttcgaga ccgccgaacg catgggtggg ctggccgccg ccgacgtggg gtgggtctct
360
gagtctgaga agggataccg cagcattcac gtcgctccgc tgagtgttgg cggcttgcta
420
cgagagaatg tctttgctca gtcc
444

<210> 2218

<211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2218
 Thr Arg Ala Ala Ser Lys Asp Leu Ser Pro Ala Ile Val Thr Thr Thr
 1 5 10 15
 Ala Lys Arg Ala Met Thr Trp Leu Asp Asp Val Gly Ala Asp Leu
 20 25 30
 Leu Asn Gln Ala Asp Ser Met Asp His Ala Leu Glu Ala Thr Val Pro
 35 40 45
 Gly Arg Val Thr Thr Pro Asp Ala Gln Val Ile Gln Thr Cys Ala Val
 50 55 60
 Leu Arg Asp Leu Ala Arg Val Ala Val Ser Gln Leu Gly Arg Asn Asp
 65 70 75 80
 Glu Asp Ser Arg Glu Pro Val Asp Ala Glu Arg Val Gln Ala Gln Ala
 85 90 95
 Xaa Met Arg Glu Val Phe Glu Thr Ala Glu Arg Met Val Gly Leu Ala
 100 105 110
 Ala Ala Asp Val Val Trp Val Ser Glu Ser Glu Lys Gly Tyr Arg Ser
 115 120 125
 Ile His Val Ala Pro Leu Ser Val Gly Gly Leu Leu Arg Glu Asn Val
 130 135 140
 Phe Ala Gln Ser
 145

<210> 2219
 <211> 688
 <212> DNA
 <213> Homo sapiens

<400> 2219
 acgcgtaccg tcgttggcat gagcgtcctg ccaactggaaa tttggctgtc attcagctac
 60
 ggcattacga atatggcgtg gatgtggcta tggttcgacg agcccgaaa ccgttgggag
 120
 tggtcgatec ttttccccgc tgggtggctg accagcgctt tggtcagtca ggggttcggt
 180
 ggaatgttcc atagtgtgca gattgcgct catgtcagca gttaccacgg catcatggtc
 240
 gctttcgcgc tcgttgggta cggatggctt gcgatgcaca acttgcgtca ccctgatgag
 300
 cgctattcga ttcgctcggc cttgataatc ggcatcggca tccagttcac ctgggaggca
 360
 gtgctgatga tctcgggtat caggccgttg acatggcgcc cgcttgttat cgattctctc
 420
 atcgagacga atctcggcgc tccgttcatt ttgctcattg tgaaagcttg gcgcgcgcca
 480
 cccgaaggaa ttcttggtc taccagtccg cgcgcgaccg cccgtggcac agcgcgagtc
 540
 tatatgaggg atgatcttgt ttctcgacgc cttctacagc gtccttgaga gcctctgcga
 600
 gcgaagggcg cgggtgtagg tctccccggg gctcgttgtg gtcctctctc tgcgtgacgc
 660

agagccgtgt gatgaggcga agtcatga
688

<210> 2220
<211> 189
<212> PRT
<213> Homo sapiens

<400> 2220
Met Ser Val Leu Pro Leu Glu Ile Trp Leu Ser Phe Ser Tyr Gly Ile
1 5 10 15
Thr Asn Met Ala Trp Met Trp Leu Trp Phe Asp Glu Pro Gly Asn Arg
20 25 30
Trp Glu Trp Ser Ile Leu Phe Pro Ala Gly Trp Leu Thr Ser Ala Leu
35 40 45
Val Ser Gln Gly Phe Gly Gly Met Phe His Ser Val Gln Ile Ala Arg
50 55 60
His Val Ser Ser Tyr His Gly Ile Met Val Ala Phe Ala Leu Val Gly
65 70 75 80
Tyr Gly Trp Leu Ala Met His Asn Leu Arg His Pro Asp Glu Arg Tyr
85 90 95
Ser Ile Arg Ser Ala Leu Ile Ile Gly Ile Gly Ile Gln Phe Thr Trp
100 105 110
Glu Ala Val Leu Met Ile Ser Gly Ile Arg Pro Leu Thr Trp Arg Pro
115 120 125
Leu Val Ile Asp Ser Leu Ile Glu Thr Asn Leu Gly Ala Pro Phe Met
130 135 140
Leu Leu Ile Val Lys Ala Trp Arg Ala Pro Pro Glu Gly Ile Pro Gly
145 150 155 160
Ser Thr Ser Pro Arg Pro Thr Ala Arg Gly Thr Ala Arg Val Tyr Met
165 170 175
Arg Asp Asp Leu Val Ser Arg Arg Leu Leu Gln Arg Pro
180 185

<210> 2221
<211> 530
<212> DNA
<213> Homo sapiens

<400> 2221
actagtgtag ctgcaatata tactcgggat ttactacagt taagccttat ccttccaccc
60
aaagaagagc aaaccgccat cgctaacgctc ctttccgaca tggacaccga actcgacgcc
120
ctacaacaac gcctcagtaa aaccaaaacc atcaagcaag gcatgatgca agaactactc
180
acagggaaaa cgagggttggg atgagccaca aggtgaattt agtgcattgag ctggataagc
240
gtattatctc ggtaaatacg ttattgtcac agcctgagct tgctattccg gcttatcagc
300
ggccttataa atggtcacaa gagaacctaa atgcgctgat gagtgattta cgaattttatc
360
gtaacaaatc ggcttatcgg ctggggacgg tgggtttttca ttatcataat gaaccgcgtag
420

acaacgagaa taccacaag ctggatattg tagacgggtca gcaacgtacc ttaaccttgt
 480
 tgctgctagt caaagccatt ttagaagaac ggttgctctgc gttaacgcgt
 530

<210> 2222
 <211> 67
 <212> PRT
 <213> Homo sapiens

<400> 2222
 Thr Ser Val Ala Ala Ile Tyr Thr Arg Asp Leu Leu Gln Leu Ser Leu
 1 5 10 15
 Ile Leu Pro Pro Lys Glu Glu Gln Thr Ala Ile Ala Asn Val Leu Ser
 20 25 30
 Asp Met Asp Thr Glu Leu Asp Ala Leu Gln Gln Arg Leu Ser Lys Thr
 35 40 45
 Lys Thr Ile Lys Gln Gly Met Met Gln Glu Leu Leu Thr Gly Lys Thr
 50 55 60
 Arg Leu Val
 65

<210> 2223
 <211> 482
 <212> DNA
 <213> Homo sapiens

<400> 2223
 cggccgcccgc ggtagtgagc cctgcgtcgg tggcgtaatg gaaaatgctg cgctgggttg
 60
 acaggcgcca gacattgttg tggacgatgc cgctgtcgat cgggtggcacg ccggtgaaga
 120
 tgcatttatc caacggccgg gacagggccg gcagttcaca gtccagtttg taaagcgctg
 180
 cgcgtcctgc gctgatatag gcctggagat gcccacatggc gtgtcgggca acctcgtagt
 240
 tcaggccgtc gagcaccaca aggatgacgt tgtgttcat aaggggagac gctccgcaac
 300
 gataggcttg actcatttca cttgaggaac ggggtcaaaa ctgtgggccc gggcaagccc
 360
 gctcccacac aagcccgtgc ccacattgga tctccaatgt gggctacagc cttactgcat
 420
 attgatgatg acttcttctt gccacttctg cggcagtgcc ttggaggtct tttcccacgc
 480
 gt
 482

<210> 2224
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 2224
 Met Ser Gln Ala Tyr Arg Cys Gly Ala Ser Pro Leu Met Lys His Asn

1		5		10		15
Val	Ile	Leu	Val	Val	Leu	Asp
					Gly	Leu
					Asn	Tyr
					Glu	Val
					Ala	Arg
					His	
		20		25		30
Ala	Met	Gly	His	Leu	Gln	Ala
					Tyr	Ile
					Ser	Ala
					Gly	Arg
					Ala	Ala
					Leu	
		35		40		45
Tyr	Lys	Leu	Asp	Cys	Glu	Leu
					Pro	Ala
					Leu	Ser
					Arg	Pro
					Leu	Asp
					Lys	
		50		55		60
Cys	Ile	Phe	Thr	Gly	Val	Pro
					Pro	Ile
					Asp	Ser
					Gly	Ile
					Val	His
					Asn	
					65	70
Asn	Val	Ser	Arg	Leu	Ser	Asn
					Gln	Arg
					Ser	Ile
					Phe	His
					Tyr	Ala
					Thr	
					85	90
Asp	Ala	Gly	Leu	Thr	Thr	Ala
					Ala	Ala
					100	105

<210> 2225

<211> 753

<212> DNA

<213> Homo sapiens

<400> 2225

```

nacgcgtctg atccacacgg gccactgacg tggcgttatg acagggagcg ggccggtgcc
60
ggcgtcatcc tcgatctcat gggtcacgga gaggatctcg tccagtatct actcaaaggg
120
cgattcactg aggtgtccgc cgtgtccgag acgttcatcc gtcagcgtcc caagccactc
180
aaggagggca tcggccacac aggttggggtc gtctcggacg agctcggggc ggtgggcaac
240
gaggattatt gcgctgtcat cgcccgatg gaaaacggag tgatgtgcac cctggagttc
300
agtcgggtca gtgttgggcc gcgcggggag tacatcgtcg agatctatgg aaccgacgga
360
tcaatccggt ggaacttcga ggatctcaac catttgcagg tctgtctggg gcgaaacaat
420
cgtgccctgc agggatatgt caactgcatg gccggaccag acttcccgga gttcatgcgt
480
ttccaaccgg gagccggaac atccatgggc tttagacaca tgaaggctgt tgaggtgctg
540
aaattcgtcc gaggggtctt ggatgggcag caatatggcc catctgtcgc cgatggttgg
600
gcctcagcgg aggtcaacga tgcgatcgtt gcctcctgcg ggggaccatg cctggcatga
660
cgtgaagccg gtttcgggga gaaccacgtt cgataagtga ccgcgtcatc gcgtgtctgt
720
gaccaggcct ggcggcacaa ccaggtcgcc ggc
753

```

<210> 2226

<211> 219

<212> PRT

<213> Homo sapiens

<400> 2226

```

Xaa Ala Ser Asp Pro His Gly Pro Leu Thr Trp Arg Tyr Asp Arg Glu

```

1	5	10	15
Arg Ala Gly Ala Gly Val Ile Leu Asp Leu Met Gly His Gly Glu Asp			
	20	25	30
Leu Val Gln Tyr Leu Leu Lys Gly Arg Phe Thr Glu Val Ser Ala Val			
	35	40	45
Ser Glu Thr Phe Ile Arg Gln Arg Pro Lys Pro Leu Lys Glu Gly Ile			
	50	55	60
Gly His Thr Gly Trp Val Val Ser Asp Glu Leu Gly Pro Val Gly Asn			
65	70	75	80
Glu Asp Tyr Cys Ala Val Ile Ala Arg Met Glu Asn Gly Val Met Cys			
	85	90	95
Thr Leu Glu Ser Ser Arg Val Ser Val Gly Pro Arg Ala Glu Tyr Ile			
	100	105	110
Val Glu Ile Tyr Gly Thr Asp Gly Ser Ile Arg Trp Asn Phe Glu Asp			
	115	120	125
Leu Asn His Leu Gln Val Cys Leu Gly Arg Asn Asn Arg Ala Leu Gln			
	130	135	140
Gly Tyr Val Asn Cys Met Ala Gly Pro Asp Phe Pro Glu Phe Met Arg			
145	150	155	160
Phe Gln Pro Gly Ala Gly Thr Ser Met Gly Phe Asp Asp Met Lys Val			
	165	170	175
Val Glu Ala Ala Lys Phe Val Arg Gly Val Leu Asp Gly Gln Gln Tyr			
	180	185	190
Gly Pro Ser Val Ala Asp Gly Trp Ala Ser Ala Glu Val Asn Asp Ala			
	195	200	205
Ile Val Ala Ser Cys Gly Gly Pro Cys Leu Ala			
	210	215	

<210> 2227

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2227

```

ggatccgaaa cgttgggagc ataaagcagc atggcgccacc tactgaagac ggtgggtggct
60
ggctgttcat gtcctttcct tagcaacttg gggctcctcta aggttctacc tggaagaga
120
gactttgtac gaacgcttcg tactcaccag gcactgtggg gtaaatcccc ggtaaagcca
180
ggaattccat ataagcagtt gacagttggg gtccccaagg agattttcca aaacgagaag
240
cgagttgcat tgtctcctgc ggggggtccag gccctgggtca agcagggcctt caatgttgtc
300
gtggaatcag gcgcaggcga agct
324

```

<210> 2228

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2228

```

Met Ala His Leu Leu Lys Thr Val Val Ala Gly Cys Ser Cys Pro Phe

```

```

      1             5             10             15
Leu Ser Asn Leu Gly Ser Ser Lys Val Leu Pro Gly Lys Arg Asp Phe
      20             25             30
Val Arg Thr Leu Arg Thr His Gln Ala Leu Trp Cys Lys Ser Pro Val
      35             40             45
Lys Pro Gly Ile Pro Tyr Lys Gln Leu Thr Val Gly Val Pro Lys Glu
      50             55             60
Ile Phe Gln Asn Glu Lys Arg Val Ala Leu Ser Pro Ala Gly Val Gln
      65             70             75             80
Ala Leu Val Lys Gln Gly Phe Asn Val Val Val Glu Ser Gly Ala Gly
      85             90             95
Glu Ala

```

<210> 2229

<211> 320

<212> DNA

<213> Homo sapiens

<400> 2229

```

acgcgtgaag gggccctgtg acgaggtcat ttctgtccat ggggggtcca gatggtgagg
60
cccacagaga gggaacgggc ggggggaggg gagagagaa gacagactca ggcagaaccc
120
tagctcagcc ccttctctgcg tgcttgcccc tgggaggatg ccatccccag tcccctcttc
180
tgggccctgc tctggggact cggcacagat ggatccagtg catcctcagc cccctgagaa
240
gctgtgctgc catcagctcc ttctctgggt acagggcacg ggaagcggct gccagcagg
300
cctcggtccc gccaagctgt
320

```

<210> 2230

<211> 94

<212> PRT

<213> Homo sapiens

<400> 2230

```

Met Gly Gly Pro Asp Gly Glu Ala His Arg Glu Gly Thr Gly Gly Gly
      1             5             10             15
Arg Gly Gly Glu Lys Thr Asp Ser Gly Arg Thr Leu Ala Gln Pro Leu
      20             25             30
Pro Ala Cys Leu Ala Leu Gly Gly Cys His Pro Gln Ser Pro Leu Leu
      35             40             45
Gly Pro Ala Leu Gly Thr Arg His Arg Trp Ile Gln Cys Ile Leu Ser
      50             55             60
Pro Leu Arg Ser Cys Ala Ala Ile Ser Ser Phe Ser Gly Tyr Arg Ala
      65             70             75             80
Arg Glu Ala Ala Ala Gln Gln Ala Ser Val Pro Pro Ser Cys
      85             90

```

<210> 2231

<211> 671

<212> DNA

<213> Homo sapiens

<400> 2231

```

gggctgtcta ccacgggctt cgggacttgg ggcagcttcc tgagctctct gagctgcagt
60
tccttcaacc acaaaatgag gagagtgcag gacctcagag gcttactgtg aggatggaga
120
aaagcccagt tcaatgcccc actgggaaat gcttcccatt aattgtggaa ttgtcgtgcc
180
catttactgt cgggggtgaca gggggggtgg gggtcagagt agagacagga gaaggaagtg
240
agcattttgt ggatacccac cacgtgccag ggactgaacc ctatctggat ctctgcagc
300
cctcccaatg gcaactgtgaa gccagtgttg ttttacagat gaggaaactg agatttgtgg
360
ctataacaga taaacagatg accctgaatg gggcaggcca tgatcatctgc catagataca
420
tgcatagaac aatgcaaacc agtcagtccc ctctgagtca gaccaggctg accatcaggg
480
acatgcagac actggcaggg ctgggggtgt tccccatcgg tgatagcctg gtgcccccat
540
ggcccctgat gccacgggt gtctggaagg ctgggtcact gctgagaaga caaggagaca
600
ttttctctca ccagctttct ttttctatt ccttcttaga cacctgagct gcggtgatca
660
cagctcttaa g
671

```

<210> 2232

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2232

```

Met Glu Lys Ser Pro Val Gln Cys Pro Thr Gly Lys Cys Phe Pro Leu
1          5          10          15
Ile Val Glu Leu Ser Cys Pro Phe Thr Val Gly Val Thr Gly Gly Val
20          25          30
Gly Val Arg Val Glu Thr Gly Glu Gly Ser Glu His Leu Trp Asp Thr
35          40          45
His His Val Pro Gly Thr Glu Pro Tyr Leu Asp Leu Leu Gln Pro Ser
50          55          60
Gln Trp His Cys Glu Ala Ser Val Val Leu Gln Met Arg Lys Leu Arg
65          70          75          80
Phe Val Ala Ile Thr Asp Lys Gln Met Thr Leu Asn Gly Ala Gly His
85          90          95
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1410										1415				1420			
Ile	Arg	His	His	Glu	Asp	Asn	Leu	Leu	Arg	Gln	Leu	Ala	Gln	Lys	Val		
1425										1430				1435			
Pro	His	Lys	Leu	Asn	Asn	Pro	Lys	Phe	Asn	Asp	Pro	His	Val	Lys	Thr		
1445										1450				1455			
Asn	Leu	Leu	Leu	Gln	Ala	His	Leu	Ser	Arg	Met	Gln	Leu	Ser	Ala	Glu		
1460										1465				1470			
Leu	Gln	Ser	Asp	Thr	Glu	Glu	Ile	Leu	Ser	Lys	Ala	Ile	Arg	Leu	Ile		
1475										1480				1485			
Gln	Ala	Cys	Val	Asp	Val	Leu	Ser	Ser	Asn	Gly	Trp	Leu	Ser	Pro	Ala		
1490										1495				1500			
Leu	Ala	Ala	Met	Glu	Leu	Ala	Gln	Met	Val	Thr	Gln	Ala	Met	Trp	Ser		
1505										1510				1515			
Lys	Asp	Ser	Tyr	Leu	Lys	Gln	Leu	Pro	His	Phe	Thr	Ser	Glu	His	Ile		
1525										1530				1535			
Lys	Arg	Cys	Thr	Asp	Lys	Gly	Val	Glu	Ser	Val	Phe	Asp	Ile	Met	Glu		
1540										1545				1550			
Met	Glu	Asp	Glu	Glu	Arg	Asn	Ala	Leu	Leu	Gln	Leu	Thr	Asp	Ser	Gln		
1555										1560				1565			
Ile	Ala	Asp	Val	Ala	Arg	Phe	Cys	Asn	Arg	Tyr	Pro	Asn	Ile	Glu	Leu		
1570										1575				1580			
Ser	Tyr	Glu	Val	Val	Asp	Lys	Asp	Ser	Ile	Arg	Ser	Gly	Gly	Pro	Val		
1585										1590				1595			
Val	Val	Leu	Val	Gln	Leu	Glu	Arg	Glu	Glu	Glu	Val	Thr	Gly	Pro	Val		
1605										1610				1615			
Ile	Ala	Pro	Leu	Phe	Pro	Gln	Lys	Arg	Glu	Glu	Gly	Trp	Trp	Val	Val		
1620										1625							

1635	1640	1645
Leu Gln Gln Lys Ala Lys Val Lys Leu Asp Phe Val Ala Pro Ala Thr		
1650	1655	1660
Gly Ala His Asn Tyr Thr Leu Tyr Phe Met Ser Asp Ala Tyr Met Gly		
1665	1670	1675
Cys Asp Gln Glu Tyr Lys Phe Ser Val Asp Val Lys Glu Ala Glu Thr		
1685	1690	1695
Asp Ser Asp Ser Asp		
1700		

<210> 2235
 <211> 586
 <212> DNA
 <213> Homo sapiens

<400> 2235
 tctagaatga gtatgaggac actctcacca gagtgagggtg aaggtgtata cagctggcac
 60
 tcagtgtcttg cacattctcc actggcagaa tgactcccgga cgtgggtcgg gctccccgga
 120
 agacaccct cgaagcagtg gtgcctctag catcttcgac ctgaggaacc tggcagctga
 180
 ctcttggttg ccctctctgc tagagcgggc ggccccagaa gatgtggacc ggcgcaatga
 240
 agcccttctga cggcagcacc ggcccccggc cctgtctccc ctctaccgg cacctgacga
 300
 ggatgaagcc ggggaacgct gtagccgct agagccacc cgcgagcac ttggacaaa
 360
 ggatcttggt caagtgtctg tcgctcaagt tcgagattga aattgagccc atctttggga
 420
 tcttggtct gtatgatgtg cggaagaaaa agaagatctc ggaaaacttc tacttcgacc
 480
 tgaactcgga ctccatgaag gggctgcttc gggctcatgg caccaccct gccatctcca
 540
 ccttgcccg ctctgccatc ttctctgtga cctaccctc acgcgt
 586

<210> 2236
 <211> 123
 <212> PRT
 <213> Homo sapiens

<400> 2236
 Met Ser Pro Lys Gln Pro Leu His Gly Val Arg Val Gln Val Glu Val
 1 5 10 15
 Glu Val Phe Arg Asp Leu Leu Phe Leu Pro His Ile Ile Gln Ser Gln
 20 25 30
 Asp Pro Lys Asp Gly Leu Asn Phe Asn Leu Glu Leu Glu Arg Gln Thr
 35 40 45
 Leu Asp Gln Asp Pro Leu Ser Lys Val Leu Ala Gly Val Ala Leu Gly
 50 55 60
 Gly Tyr Ser Val Pro Arg Leu His Pro Arg Gln Val Pro Gly Arg Gly
 65 70 75 80
 Glu Ala Gly Pro Gly Ala Gly Ala Ala Val Glu Gly Leu His Cys Ala

	85		90		95
Gly Pro His	Leu Leu Gly Pro Pro Ala Leu Ala Glu Arg Ala Thr Met				
	100		105		110
Ser Gln Leu	Pro Gly Ser Ser Gly Arg Arg Cys				
	115		120		

<210> 2237

<211> 421

<212> DNA

<213> Homo sapiens

<400> 2237

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cctaggaagg cacacctgtg tcccactgca gccaaagagga agcaccccaa acactcctct
60
tggtggcgag gagtgctggc cagcttgggg atagtccctg gaagtggctg ggagcactga
120
gggaggagct gaggtccaag cctcctcca gtgcatcacc ctggtcagga gtggggcagt
180
gtggagccag gggctcttca gccagcacct gctgcactat gggctccagc tgtgcaagac
240
caccogtgag aaggagtctt gttgggagca ggggtgggaa gcactgtggg agaggtgtcc
300
ttggctcggg tagcaggagc cttgatgtat cttgaagcca gggggccgac tgaggcgctt
360
gtctgaaggc ctccatgaga gggagggggc tggagggggc tgttcccaat aatagctcta
420
t
421

```

<210> 2238

<211> 124

<212> PRT

<213> Homo sapiens

<400> 2238

Met Glu Ala Phe Arg Gln Ala Pro Gln Ser Ala Pro Trp Leu Gln Asp	
1	5 10 15
Thr Ser Arg Ser Leu Leu Pro Glu Pro Arg Thr Pro Leu Pro Gln Cys	
	20 25 30
Phe Pro Thr Leu Leu Pro Thr Arg Leu Leu Leu Thr Gly Gly Leu Ala	
	35 40 45
Gln Leu Glu Pro Ile Val Gln Gln Val Leu Ala Glu Glu Pro Leu Ala	
	50 55 60
Pro His Cys Pro Thr Pro Asp Gln Gly Asp Ala Leu Glu Glu Gly Leu	
65	70 75 80
Asp Leu Ser Ser Ser Leu Ser Ala Pro Asp His Phe Gln Gly Leu Ser	
	85 90 95
Pro Ser Trp Pro Ala Leu Leu Arg Pro Lys Arg Ser Val Trp Gly Ala	
	100 105 110
Ser Ser Trp Leu Gln Trp Asp Thr Gly Val Pro Ser	
	115 120

<210> 2239

<211> 623

<212> DNA

<213> Homo sapiens

<400> 2239

gctagcagga ctcagaaatc tgctgttgag cacaaagcca aaaaatctct gtcccatcct
 60
 agccattcca ggcctggggc catggtcacc ccacacaata aggctaagag tccaggtgtc
 120
 aggcagccag gcagcagctc tagctcagcc cctgggcagc ccagcacagg gggtgctcga
 180
 cccacagtta gttctggccc tgtgcctagg cgccagaatg gcagctccag ctcaggacct
 240
 gagcgatcaa tcagtgggtc caagaagcca accaatgact caaatccctc taggcggaca
 300
 gtcagtggta catgtggccc tggacaacct gcaagcagct caggtggccc tgggcgacct
 360
 atcagtgggt cagttagttc tgcaagacct ttgggcagct ctcgtggccc tggccggcct
 420
 gtgagcagtc cacatgaact tcgacgacca gtgagtggct tgggcccccc ggggcggtct
 480
 gtcagtggcc ctgggagatc cataagtggc ccaattccag ctggacggac tgtcagtaat
 540
 tcagtcccag gaagaccagt gagcagcttg ggacctgggc aaacagttag tagctcaggt
 600
 ccactataa agcctaagtg cac
 623

<210> 2240

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2240

Ala Ser Arg Thr Gln Lys Ser Ala Val Glu His Lys Ala Lys Lys Ser
 1 5 10 15
 Leu Ser His Pro Ser His Ser Arg Pro Gly Pro Met Val Thr Pro His
 20 25 30
 Asn Lys Ala Lys Ser Pro Gly Val Arg Gln Pro Gly Ser Ser Ser Ser
 35 40 45
 Ser Ala Pro Gly Gln Pro Ser Thr Gly Val Ala Arg Pro Thr Val Ser
 50 55 60
 Ser Gly Pro Val Pro Arg Arg Gln Asn Gly Ser Ser Ser Ser Gly Pro
 65 70 75 80
 Glu Arg Ser Ile Ser Gly Ser Lys Lys Pro Thr Asn Asp Ser Asn Pro
 85 90 95
 Ser Arg Arg Thr Val Ser Gly Thr Cys Gly Pro Gly Gln Pro Ala Ser
 100 105 110
 Ser Ser Gly Gly Pro Gly Arg Pro Ile Ser Gly Ser Val Ser Ser Ala
 115 120 125
 Arg Pro Leu Gly Ser Ser Arg Gly Pro Gly Arg Pro Val Ser Ser Pro
 130 135 140
 His Glu Leu Arg Arg Pro Val Ser Gly Leu Gly Pro Pro Gly Arg Ser
 145 150 155 160
 Val Ser Gly Pro Gly Arg Ser Ile Ser Gly Pro Ile Pro Ala Gly Arg

1650


```

      100      105      110
Gly Leu Val Val Gly Pro Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln
      115      120      125
Gln Thr Asn Thr Tyr Ile Ile Thr Pro Ser Arg Asp Arg Asp Pro Val
      130      135      140
Phe Glu Ile Thr Gly Ala Pro Gly Asn Val Glu Arg Ala Arg Glu Glu
145      150      155      160
Ile Glu Thr His Ile Ala Val Arg Thr Gly Lys Ile Leu Glu Tyr Asn
      165      170      175
Asn Glu Asn Asp Phe Leu Ala Gly Ser Pro Asp Ala Ala Ile Asp Ser
      180      185      190
Arg Tyr Ser Asp Ala Trp Arg Val His Gln Pro Gly Cys Lys Pro Leu
      195      200      205
Ser Thr Phe Arg Gln Asn Ser Leu Gly Cys
      210      215

```

<210> 2243

<211> 384

<212> DNA

<213> Homo sapiens

<400> 2243

```

gaattcagca tttaaagtgc actcgttggc atgcaatttg ctgtcatgaa aacgactgtg
60
gattcatttc ctggtaagaa tcttctgact tattgagctg catgtcagaa gcaaaaagca
120
aaaaaaccaa atatgtacat aaaacagtgt tatcattcct taaaagagaa ggaaaaataaa
180
tcctaaata atgtggactg gaacacagaa atccaaggct ggccgcacgg gtcttggctg
240
ggatggcatc cggggagctg ctgctgggga cgtgcttgcc ggcacaggtc aggggagccg
300
ggttctgcct cctccttgcc cactctcttt gcgccctccc tgtgtctgcc tgtcttgttt
360
tacctcccat cctgggccct tgga
384

```

<210> 2244

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2244

```

Met Gly Gly Lys Thr Arg Gln Ala Ser Thr Gly Arg Ala Gln Arg Glu
1      5      10      15
Trp Ala Arg Arg Arg Gln Asn Pro Ala Pro Leu Thr Cys Ala Gly Lys
      20      25      30
His Val Pro Ser Ser Ser Ser Pro Asp Ala Ile Pro Ala Arg Thr Arg
      35      40      45
Ala Ala Ser Leu Gly Phe Leu Cys Ser Ser Pro His Tyr Leu Gly Ile
      50      55      60
Tyr Phe Pro Ser Leu Leu Arg Asn Asp Asn Thr Val Leu Cys Thr Tyr
65      70      75      80
Leu Val Phe Leu Leu Phe Ala Ser Asp Met Gln Leu Asn Lys Ser Glu

```

85 90 95
 Asp Ser Tyr Gln Glu Met Asn Pro Gln Ser Phe Ser
 100 105

<210> 2245
 <211> 632
 <212> DNA
 <213> Homo sapiens

<400> 2245
 acgcgtgcga ttaccgtcaa ggctgggtgtg gtgagcgctg atctgcacga gcggaagtct
 60
 tcgagagaag aggtcggacg cgagaggctc aactatggtc acaccttggc ccacgtctatt
 120
 gaggccaca agcatttcac gtggcgctcat ggcgaggctg acgcggtggg catgggtgttt
 180
 gcggccgaac tgtcgacccg gtacctggga ctgtccgatg aggtcgttgc gcgcacccgc
 240
 actatcctgt ctgagatcgg attgcctgtt acctgtgacg agattaagtg ggcagatctg
 300
 cgcaagacga tgaacgtgga caagaaaacc agggtagacc cgcagaccgg gcgtcaagtg
 360
 ttgcggtttg tcggtattca caaaccgggt caggtcgcca tgatcgtcga ccctgacgag
 420
 gccgcttttag ccgagtgcta cgaccggtgt tccgcacggg aaaaacgttc ggaaatgaac
 480
 atgtggctgc gggtcagtcg gcattcaggc ctccgtgacg ccgtcgaccc caagtgatgt
 540
 gacgattcgg gaaatatctt gttgggcact cttgagcctc gcctgattcc ccatacccga
 600
 cttaagtcca gtatcgacgg catgaatccg ga
 632

<210> 2246
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2246
 Thr Arg Ala Ile Thr Val Lys Ala Gly Val Val Ser Ala Asp Leu His
 1 5 10 15
 Glu Arg Thr Ser Ser Arg Glu Glu Val Gly Arg Glu Arg Leu Asn Tyr
 20 25 30
 Gly His Thr Leu Ala His Ala Ile Glu Ala His Lys His Phe Thr Trp
 35 40 45
 Arg His Gly Glu Ala Asp Ala Val Gly Met Val Phe Ala Ala Glu Leu
 50 55 60
 Ser His Arg Tyr Leu Gly Leu Ser Asp Glu Val Val Ala Arg Thr Arg
 65 70 75 80
 Thr Ile Leu Ser Glu Ile Gly Leu Pro Val Thr Cys Asp Glu Ile Lys
 85 90 95
 Trp Ala Asp Leu Arg Lys Thr Met Asn Val Asp Lys Lys Thr Arg Val
 100 105 110
 Asp Pro Gln Thr Gly Arg Gln Val Leu Arg Phe Val Gly Ile His Lys

```

      115              120              125
Pro Gly Gln Val Ala Met Ile Val Asp Pro Asp Glu Ala Ala Leu Ala
      130              135              140
Glu Cys Tyr Asp Arg Cys Ser Ala Arg
145              150

```

<210> 2247
 <211> 324
 <212> DNA
 <213> Homo sapiens

```

<400> 2247
gggcgttcgc ctccaggggtt ctccccgaca ctggatgccca acctgcccag gggcagaagg
60
gaggttgggc gtgggggagtg ccgggtacag tcagagttgc caggacagtt tggagcagtg
120
cctcttaatc ttggccgcac agcacctggg agctttaaat agacccccac gccctggggcg
180
ccccaccgc tgacccaacc gatctcagct ctgcctttcc cgctctctg ctgggttgca
240
taagccagcg attcccaacc ccggctgtac ctggaagcta cccaggagc ttctggagaa
300
tgtgccgtgt gagccatccc cctg
324

```

<210> 2248
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 2248
Met Ala His Thr Ala His Ser Pro Glu Ala Pro Gly Val Ala Ser Arg
1      5      10      15
Tyr Ser Arg Gly Trp Glu Ser Leu Ala Tyr Ala Thr Gln Gln Arg Gly
      20      25      30
Gly Lys Gly Arg Ala Glu Ile Gly Trp Val Ser Gly Gly Gly Ala Gln
      35      40      45
Gly Val Gly Val Tyr Leu Lys Leu Pro Gly Ala Val Arg Pro Arg Leu
      50      55      60
Arg Gly Thr Ala Pro Asn Cys Pro Gly Asn Ser Asp Cys Thr Arg His
      65      70      75      80
Ser Pro Arg Pro Thr Ser Leu Leu Pro Leu Gly Arg Leu Ala Ser Ser
      85      90      95
Val Gly Glu Asn Pro Gly Gly Glu Arg
      100      105

```

<210> 2249
 <211> 394
 <212> DNA
 <213> Homo sapiens

```

<400> 2249
gaaaaccgga taacaggggtg tatacaagcc tetgagttct gggagcaaca accagctcaa
60

```

cccgcaaggg aaagtgagaa agcaattaag ttgggaaccg cgggggttttc ccattccac
 120
 ggtggaaacc ggggccagtg aattgaaatc cgcttcctta aggcgaaatg ggcccttaaa
 180
 aggcaaggtc aaccgcccgc cagtgtgatg gaatttgcaa gaattcgggt tagcaccctc
 240
 ccggcttttc tcccgaccgc gtgcaggggtg ggctgcgctg ggctgggag gaactgggag
 300
 ctgggggctc atgtcctgta taaaggggct gcaggggcgc tgtctcccc cagaagactg
 360
 gccacatggg gacaggcctc ctgggggcag atct
 394

<210> 2250

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2250

Met	Ser	Pro	Gln	Leu	Pro	Val	Pro	Pro	Arg	Pro	Ser	Ala	Ala	His	Pro
1				5					10					15	
Ala	Arg	Gly	Arg	Glu	Lys	Ser	Arg	Glu	Gly	Ala	Lys	Pro	Asn	Ser	Cys
			20					25					30		
Lys	Phe	His	His	Thr	Gly	Gly	Arg	Leu	Thr	Leu	Pro	Phe	Lys	Gly	Pro
		35					40					45			
Phe	Arg	Leu	Lys	Glu	Ala	Asp	Phe	Asn	Ser	Leu	Ala	Ala	Val	Ser	Thr
		50				55					60				
Val	Gly	Met	Gly	Lys	Pro	Arg	Gly	Ser	Gln	Leu	Asn	Cys	Phe	Leu	Thr
65					70					75				80	
Phe	Pro	Cys	Gly	Leu	Ser	Trp	Leu	Leu	Leu	Pro	Glu	Leu	Arg	Gly	Leu
				85					90					95	
Tyr	Thr	Pro	Cys	Tyr	Pro	Val	Phe								
															100

<210> 2251

<211> 654

<212> DNA

<213> Homo sapiens

<400> 2251

acgcgtactt attcgccacc atgattatga ccagtgtttc cagtcggttc agttgttgca
 60
 gtggaatagt cagggttaaat ttaatgtgac cgtttatcgc aatctgccga ccactcgcca
 120
 ttcaatcatg acttcgtgat aaaagattga gtgtgaggtt ataacgccga agcggtaaaa
 180
 attttaattt ttgccgctga ggggttgacc aagcgaagcg cggtagggtt tctgcttagg
 240
 agtttaatca tgtttcagac ttttatttct cgccataatt caaacttttt ttctgataag
 300
 ctggtttctca cttctgttac tccagettct tcggcacctg ttttacagac acctaaagct
 360
 acatcgtaaa cgttatatatt tgatagtttg acggttaatg ctggtaatgg tgggttttctt
 420

cattgcattc agatggatac atctgtcaac gccgctaatac aggttggttc tgttggtgct
 480
 gatattgctt ttgatgccga ccctaaattt ttgacctgtt tggttcgctt tgagtcttct
 540
 tcggttccga ctacctccc gactgcctat gatgtttatc ctttgatgg tgcctatgat
 600
 ggtggttatt ataccgtcaa ggactgtgtg actattgacg tccttcctcg tacg
 654

<210> 2252

<211> 135

<212> PRT

<213> Homo sapiens

<400> 2252

Met	Phe	Gln	Thr	Phe	Ile	Ser	Arg	His	Asn	Ser	Asn	Phe	Phe	Ser	Asp
1				5					10					15	
Lys	Leu	Val	Leu	Thr	Ser	Val	Thr	Pro	Ala	Ser	Ser	Ala	Pro	Val	Leu
			20					25					30		
Gln	Thr	Pro	Lys	Ala	Thr	Ser	Ser	Thr	Leu	Tyr	Phe	Asp	Ser	Leu	Thr
		35					40				45				
Val	Asn	Ala	Gly	Asn	Gly	Gly	Phe	Leu	His	Cys	Ile	Gln	Met	Asp	Thr
	50				55						60				
Ser	Val	Asn	Ala	Ala	Asn	Gln	Val	Val	Ser	Val	Gly	Ala	Asp	Ile	Ala
65					70				75					80	
Phe	Asp	Ala	Asp	Pro	Lys	Phe	Phe	Ala	Cys	Leu	Val	Arg	Phe	Glu	Ser
			85					90					95		
Ser	Ser	Val	Pro	Thr	Thr	Leu	Pro	Thr	Ala	Tyr	Asp	Val	Tyr	Pro	Leu
			100					105					110		
Asp	Gly	Arg	His	Asp	Gly	Gly	Tyr	Tyr	Thr	Val	Lys	Asp	Cys	Val	Thr
		115					120					125			
Ile	Asp	Val	Leu	Pro	Arg	Thr									
	130					135									

<210> 2253

<211> 327

<212> DNA

<213> Homo sapiens

<400> 2253

ggatcctgct gggcctcttt tacgtgatgt tgaccagcc gctggtgcgc attattcgcg
 60
 cactgagcac cagcaagcag gcccgctgg attgcccacc gggtcacgaa aacgatgaaa
 120
 tcggcgtatt ggtcaacgtc gcccaaccagc aattcgacaa tatggaaacc gaaatcgagc
 180
 agcgccgcca cgccgaggac cgctcaccg aatacctggg ccaactggaa gatatcgctc
 240
 ccgcacgcac cctggagctc aaggccagca accaacgctt gagccaatcc aacgatgagc
 300
 tggaagcggc aaagttgacc gccttgg
 327

<210> 2254

<211> 100
 <212> PRT
 <213> Homo sapiens

<400> 2254
 Met Leu Thr Gln Pro Leu Val Arg Ile Ile Arg Ala Leu Ser Thr Ser
 1 5 10 15
 Lys Gln Ala Arg Leu Asp Cys Pro Pro Gly His Glu Asn Asp Glu Ile
 20 25 30
 Gly Val Leu Val Asn Val Ala Asn Gln Gln Phe Asp Asn Met Glu Thr
 35 40 45
 Glu Ile Glu Gln Arg Arg His Ala Glu Asp Arg Leu Thr Glu Tyr Leu
 50 55 60
 Gly Gln Leu Glu Asp Ile Val Ser Ala Arg Thr Leu Glu Leu Lys Ala
 65 70 75 80
 Ser Asn Gln Arg Leu Ser Gln Ser Asn Asp Glu Leu Glu Ala Ala Lys
 85 90 95
 Leu Thr Ala Leu
 100

<210> 2255
 <211> 357
 <212> DNA
 <213> Homo sapiens

<400> 2255
 nngctagcac atgagaagtg tgaagtttat accttgcttg ggcgatcacg ccgttttcca
 60
 aatattggctc atgcaacttc tggccaaagg ggtcacattg agcgtgctgc tatcaatgct
 120
 cctgtacagg gcagtgcagc tgatgttgct atgtgtgcaa tgcttgagat agacaggaat
 180
 actcgtctta aggagcttgg ttggacgcta ctcttgacagg tgcattgatga agtgatactg
 240
 gaagggcctt cagagtctgc ggagtnggcc aagtccatag ttgttgagtg catgtctaag
 300
 cccttctatg gcaccaatat cctgagggtc gaccttgctg ttgatgccaa gtgtgca
 357

<210> 2256
 <211> 119
 <212> PRT
 <213> Homo sapiens

<400> 2256
 Xaa Leu Ala His Glu Lys Cys Glu Val Tyr Thr Leu Leu Gly Arg Ser
 1 5 10 15
 Arg Arg Phe Pro Asn Met Ala His Ala Thr Ser Gly Gln Arg Gly His
 20 25 30
 Ile Glu Arg Ala Ala Ile Asn Ala Pro Val Gln Gly Ser Ala Ala Asp
 35 40 45
 Val Ala Met Cys Ala Met Leu Glu Ile Asp Arg Asn Thr Arg Leu Lys
 50 55 60
 Glu Leu Gly Trp Thr Leu Leu Leu Gln Val His Asp Glu Val Ile Leu

```

65          70          75          80
Glu Gly Pro Ser Glu Ser Ala Glu Xaa Ala Lys Ser Ile Val Val Glu
          85          90          95
Cys Met Ser Lys Pro Phe Tyr Gly Thr Asn Ile Leu Arg Val Asp Leu
          100          105          110
Ala Val Asp Ala Lys Cys Ala
          115

```

<210> 2257

<211> 626

<212> DNA

<213> Homo sapiens

<400> 2257

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nnaatgacaa aaaatatgaa ccaaaatagt gacagtggca gtacaaataa ctataaaagc
60
ctgaaaccta aattagaaaa tctgagttct ttaccaccag attctgacag aacatcagaa
120
gtatatctac atgaagaatt acagcaggac atgcaaaagt ttaagaatga ggtcaacaca
180
ttagaagaag agttcctggc tttgaagaaa gaaaatgttc aacttcataa agaggttgaa
240
gaagaaatgg agaagcacag aagtaatagc acagaattat caggaaccct aactgatggg
300
actactgttg gcaatgatga tgatggacta aatcagcaga ttcctaggaa ggaaaatgaa
360
gagcatgaca ggccctgcaga taaaacagct aatgaaaaga acaagggtcaa aaaccaaata
420
tatactgagg ctgactttgc tgactcaatg gagccatctg aaatagcctc agaggattgt
480
gaattgtctc actctgttta tgagaatttt atgttgctga ttgaacaact tagaatggag
540
tataaaggta ggaccactgc ataaatgcaa ggccttttga tgtatcctgc agtaatgtgt
600
gtatacattg ctgagaactg acgcgt
626

```

<210> 2258

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2258

```

Xaa Met Thr Lys Asn Met Asn Gln Asn Ser Asp Ser Gly Ser Thr Asn
1          5          10          15
Asn Tyr Lys Ser Leu Lys Pro Lys Leu Glu Asn Leu Ser Ser Leu Pro
          20          25          30
Pro Asp Ser Asp Arg Thr Ser Glu Val Tyr Leu His Glu Glu Leu Gln
          35          40          45
Gln Asp Met Gln Lys Phe Lys Asn Glu Val Asn Thr Leu Glu Glu Glu
          50          55          60
Phe Leu Ala Leu Lys Lys Glu Asn Val Gln Leu His Lys Glu Val Glu
65          70          75          80
Glu Glu Met Glu Lys His Arg Ser Asn Ser Thr Glu Leu Ser Gly Thr

```

```
<210> 2259
<211> 425
<212> DNA
<213> Homo sapiens
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<210> 2260
<211> 141
<212> PRT
<213> Homo sapiens
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1658

				85						90					95				
Val	Val	Asp	Asp	Arg	Pro	Glu	Tyr	Val	Val	Pro	Glu	Phe	Phe	Asp	Glu				
			100						105					110					
Arg	Val	Thr	Arg	Lys	Cys	Leu	Pro	Leu	Glu	Asn	Phe	Lys	Asn	Asp	Leu				
		115					120						125						
Pro	Leu	Asp	Glu	Tyr	Asn	Gly	Phe	Ile	Ile	Val	Thr	Arg							
	130					135					140								

<210> 2261

<211> 660

<212> DNA

<213> Homo sapiens

<400> 2261

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120
tgtcgggtgca cgetgaccga gaggtccgtg cggagagtac tcccgatgat atttgccggc
180
agctcgatgc cgtggccgcc atgatggccc ttgtctatgg gtcgaatgtg actattcccg
240
acgatgccgg gaggtctctc gacaagcttc actgaacggg gttcaattgg tcccaacggc
300
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420
gccgtcatcc cgccgatgtt catggtgggg gcgggtccctt ttgcccttca gatggttgcc
480
gtcatgctgg cgccgatggt gctgggaagt atccgtggcg gatgcgcggg aggcttgtat
540
atccttgtcg gcgcgctggg gctgcccgtc ttcagcggtg ggtctagcgg gattggcgtc
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660

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<210> 2262

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2262

Met	Pro	Gly	Gly	Ser	Ser	Thr	Ser	Phe	Thr	Glu	Arg	Cys	Ser	Ile	Gly				
1				5				10						15					
Pro	Asn	Gly	Cys	Pro	Cys	Gly	Gln	Pro	Leu	Tyr	Leu	Val	Met	Gly	Arg				
		20					25						30						
Asn	Pro	Met	Ser	Ser	Arg	Asn	Gly	Phe	Gln	Ala	Thr	Asp	Leu	Ala	Leu				
		35				40					45								
Ile	Ala	Val	Phe	Ala	Ala	Leu	Ile	Ala	Val	Leu	Ala	Val	Ile	Pro	Pro				
	50					55				60									
Met	Phe	Met	Val	Gly	Ala	Val	Pro	Phe	Ala	Leu	Gln	Met	Val	Ala	Val				
65					70				75					80					
Met	Leu	Ala	Pro	Met	Val	Leu	Gly	Ser	Ile	Arg	Gly	Gly	Cys	Ala	Val				

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      85              90              95
Gly Leu Tyr Ile Leu Val Gly Ala Leu Gly Leu Pro Val Phe Ser Gly
      100              105              110
Gly Ser Ser Gly Ile Gly Val Leu Val Gly Pro Thr Gly Gly Tyr Leu
      115              120              125
Trp Gly Trp Leu Ile Gly Ala Phe Val Ala Gly
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<210> 2263

<211> 491

<212> DNA

<213> Homo sapiens

<400> 2263

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120
gagggcaccc ggtctcgcac cggcgcaatg ggcaccttca aacctggggc tgccgcattg
180
gctatttcac gtgggggttcc gggtatcccc attgcttttag taggagcatg ggcggctatg
240
ccgtccgagc aagccagggt accaaaagga cgtccattgg tccacgtggc tattggacac
300
cctatggacc ctgttccccg cgagatcgcc caccaattct ccgaacggat tcgtcgccag
360
gtcattgagt tgcacgacca aaccgcccgc gcctacggca tgccaaccct tgacgaatac
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491

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<210> 2264

<211> 163

<212> PRT

<213> Homo sapiens

<400> 2264

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Arg Ser Pro Arg Ser His Arg Gly Met Ala Gly Ser Leu Leu Thr Asp
      20      25      30
Gly Val Pro Leu Leu Ile Phe Pro Glu Gly Thr Arg Ser Arg Thr Gly
      35      40      45
Ala Met Gly Thr Phe Lys Pro Gly Ala Ala Ala Leu Ala Ile Ser Arg
      50      55      60
Gly Val Pro Val Ile Pro Ile Ala Leu Val Gly Ala Trp Ala Ala Met
65      70      75      80
Pro Ser Glu Gln Ala Arg Leu Pro Lys Gly Arg Pro Leu Val His Val
      85      90      95
Ala Ile Gly His Pro Met Asp Pro Val Pro Gly Glu Ile Ala His Gln
      100      105      110
Phe Ser Glu Arg Ile Arg Arg Gln Val Ile Glu Leu His Asp Gln Thr

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	115		120		125										
Ala	Arg	Ala	Tyr	Gly	Met	Pro	Thr	Leu	Asp	Glu	Tyr	Gly	Arg	His	Arg
	130				135					140					
Ala	Leu	Ser	Gln	Ala	Ser	Glu	Ser	Gly	Asp	Thr	Ala	Ser	Thr	Asn	His
145					150					155					160
Ser	Thr	Cys													

<210> 2265

<211> 328

<212> DNA

<213> Homo sapiens

<400> 2265

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120
cataccaccc gagaggagga gaggggtggtg ggagaaatca gatcagagtt caaaatgcac
180
cggaagggct cggaaatgta agactgcacc ttgcaggaac tgtcaatgcc actaccaata
240
tcactcactt acgtcaagca cttgagagca gctgcgaaca caattctctg actcctaacc
300
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328

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<210> 2266

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2266

Met	Gly	Ile	Gly	Gln	His	Gly	Trp	Ile	Tyr	Cys	Ile	Thr	Cys	Leu	Pro
1			5					10						15	
Ser	Gly	Lys	Ser	Gln	His	Gly	Arg	His	Met	Leu	Ala	Glu	Thr	Leu	Leu
		20					25					30			
Glu	Leu	Pro	Leu	Ser	Ile	Asp	Ala	Tyr	His	Pro	Arg	Gly	Gly	Glu	Gly
		35				40						45			
Gly	Gly	Arg	Asn	Gln	Ile	Arg	Val	Gln	Asn	Ala	Pro	Glu	Gly	Leu	Gly
		50				55				60					
Asn	Val	Arg	Leu	His	Leu	Ala	Gly	Thr	Val	Asn	Ala	Thr	Thr	Asn	Ile
65				70					75					80	
Thr	His	Leu	Arg	Gln	Ala	Leu	Glu	Ser	Ser	Cys	Glu	His	Asn	Ser	Leu
				85				90						95	
Thr	Pro	Asn	Leu												

<210> 2267

<211> 370

<212> DNA

<213> Homo sapiens

<400> 2267

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 120
 cgagggagcc accactgaat tgcactctcg ctggggagtt aagccatata cccctaagac
 180
 agcagtgacc ggagtggcca atctgtacag ggacaggctc aaggccacag caactcaggg
 240
 gacagagatg gtgaagcagg catgtcctaa agcctccctt ctttaaccctg accttgaagg
 300
 acaggaaaca agtcatttac gtatgttgta ggcctagagc aagggtattgc agagatgggc
 360
 gtcaacgcgt
 370

<210> 2268

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2268

Met	Ala	Asp	His	Gly	Gly	Leu	Met	Gln	Ala	Gly	Lys	Ala	Arg	Gln	Ser
1				5				10						15	
Ser	Gln	Lys	Gln	Val	Thr	Glu	Gly	Ala	Thr	Thr	Glu	Leu	His	Ser	Arg
			20					25					30		
Trp	Gly	Val	Lys	Pro	Tyr	Pro	Pro	Lys	Thr	Ala	Val	Thr	Gly	Val	Ala
			35					40					45		
Asn	Leu	Tyr	Arg	Asp	Arg	Leu	Lys	Ala	Thr	Ala	Thr	Gln	Gly	Thr	Glu
			50					55				60			
Met	Val	Lys	Gln	Ala	Cys	Pro	Lys	Ala	Ser	Leu	Leu	Asn	Pro	Asp	Leu
65					70					75					80
Glu	Gly	Gln	Glu	Thr	Ser	His	Leu	Arg	Met	Leu					
					85					90					

<210> 2269

<211> 507

<212> DNA

<213> Homo sapiens

<400> 2269

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 120
 gacaaacgtc tgcttgacaa atacggagcc ccgaccgccg aggctatggg ggagtcggca
 180
 ctgtgggagg ccagcctctt tgagcaatac ggattccggg atttcaaaat ctcggtgaag
 240
 caccacgacc cggtcgtcat gatccgtgcc tatgaacagc tcgccgccaa atgcgattat
 300
 ccccttcatt tgggcgttac tgaggctggg ccggccttcc aaggcaccat caagtcggcg
 360
 gtggccttcg ggcattctct tgccgagggg atcggcgata ccatacgcgt ctcccttgctg
 420

gctgatccgg tcgaggaagt caaggtgggt atcaagatcc tggagtcgct caacctacgt
 480
 cctcgaggtc tagagatcgt ctctctgc
 507

<210> 2270
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 2270
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 Ile Glu Ser Ile Cys Lys Ala Ala Thr Glu His Gly Thr Ser Ile Arg
 20 25 30
 Ile Gly Val Asn Ala Gly Ser Leu Asp Lys Arg Leu Leu Asp Lys Tyr
 35 40 45
 Gly Ala Pro Thr Ala Glu Ala Met Val Glu Ser Ala Leu Trp Glu Ala
 50 55 60
 Ser Leu Phe Glu Gln Tyr Gly Phe Arg Asp Phe Lys Ile Ser Val Lys
 65 70 75 80
 His His Asp Pro Val Val Met Ile Arg Ala Tyr Glu Gln Leu Ala Ala
 85 90 95
 Lys Cys Asp Tyr Pro Leu His Leu Gly Val Thr Glu Ala Gly Pro Ala
 100 105 110
 Phe Gln Gly Thr Ile Lys Ser Ala Val Ala Phe Gly His Leu Leu Ala
 115 120 125
 Glu Gly Ile Gly Asp Thr Ile Arg Val Ser Leu Ser Ala Asp Pro Val
 130 135 140
 Glu Glu Val Lys Val Gly Ile Lys Ile Leu Glu Ser Leu Asn Leu Arg
 145 150 155 160
 Pro Arg Gly Leu Ile Val Ser Cys
 165

<210> 2271
 <211> 573
 <212> DNA
 <213> Homo sapiens

<400> 2271
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 120
 gaaggcatgg cgccgttgac ctccgacgcg gtggcgcggt tggccactta cagcgcacgg
 180
 ctggcggacc accaagggcg tgtgtccgcg cgcattggcg acttgttcca actggtcagc
 240
 gagggcgact ttatccgcc cctggcgggc gacgagatga ctgatgccgg ccatatcgaa
 300
 cgggcgctca aggccaaaggc cacgcgtacc gggcggtgtat cggcgcggat tctcgacgac
 360
 atgctcgctg gggtcacct gatcgacacc gccgggtgcg ccgtgggcaa atgcaacggg
 420

ctgacggtgc tggaaagtcgg cgattcggcg ttcggcgtgc cggcgcgat ttccgccacg
 480
 gtgtaccggc ggggcagcgg cattgtcgac atcgagcgcg aagttaacct cggccagccg
 540
 atccactcca agggcggtgat gatccttacc ggt
 573

<210> 2272

<211> 191

<212> PRT

<213> Homo sapiens

<400> 2272

Xaa	Ala	Asp	Pro	Asp	Phe	Gln	Glu	Met	Leu	Arg	Ala	Leu	Val	Asp	Phe
1				5					10					15	
Asp	Glu	Asp	Ile	Pro	Met	Val	Asp	Glu	Ser	Leu	Glu	Gln	Phe	Ala	Gln
			20					25					30		
Leu	Leu	Lys	Thr	Arg	Thr	Ser	Glu	Glu	Gly	Met	Ala	Pro	Leu	Thr	Ser
		35					40					45			
Asp	Ala	Val	Ala	Arg	Leu	Ala	Thr	Tyr	Ser	Ala	Arg	Leu	Ala	Asp	His
	50				55					60					
Gln	Gly	Arg	Val	Ser	Ala	Arg	Ile	Gly	Asp	Leu	Phe	Gln	Leu	Val	Ser
65				70					75				80		
Glu	Ala	Asp	Phe	Ile	Arg	His	Leu	Ala	Gly	Asp	Glu	Met	Thr	Asp	Ala
			85					90					95		
Gly	His	Ile	Glu	Arg	Ala	Leu	Lys	Ala	Lys	Ala	Thr	Arg	Thr	Gly	Arg
			100				105						110		
Val	Ser	Ala	Arg	Ile	Leu	Asp	Asp	Met	Leu	Ala	Gly	Val	Ile	Leu	Ile
		115				120						125			
Asp	Thr	Ala	Gly	Ala	Ala	Val	Gly	Lys	Cys	Asn	Gly	Leu	Thr	Val	Leu
	130				135					140					
Glu	Val	Gly	Asp	Ser	Ala	Phe	Gly	Val	Pro	Ala	Arg	Ile	Ser	Ala	Thr
145				150					155					160	
Val	Tyr	Pro	Gly	Gly	Ser	Gly	Ile	Val	Asp	Ile	Glu	Arg	Glu	Val	Asn
			165				170						175		
Leu	Gly	Gln	Pro	Ile	His	Ser	Lys	Gly	Val	Met	Ile	Leu	Thr	Gly	
		180					185					190			

<210> 2273

<211> 4355

<212> DNA

<213> Homo sapiens

<400> 2273

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 120
 gagaggagg aggaagtgat cacctgtttt gagagggcct cctggatcgc tcaggtgttc
 180
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 300

aacctgaaga aggggaacat cgtgaagggc atgagagagc tccgggaggt gctgaggact
 360
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 420
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 480
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 540
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 780
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<210> 2274

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2274

Ser	Phe	Gln	His	Ala	Ser	Gly	Phe	Leu	Gly	Glu	His	Ser	Pro	Gly	Gly
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Gln	Arg	Ser	Cys	Arg	Gly	Gly	Leu	Ser	Leu	Glu	Arg	Leu	Pro	Asn	Ser
			20				25						30		
Ile	Ala	Ser	Arg	Phe	Arg	Leu	Thr	Glu	Arg	Glu	Glu	Glu	Val	Ile	Thr
			35				40						45		
Cys	Phe	Glu	Arg	Ala	Ser	Trp	Ile	Ala	Gln	Val	Phe	Leu	Gln	Glu	Leu
		50				55				60					
Glu	Lys	Thr	Thr	Asn	Asn	Ser	Thr	Ser	Arg	His	Leu	Lys	Gly	Cys	His
65				70					75					80	
Pro	Leu	Asp	Tyr	Glu	Leu	Thr	Tyr	Phe	Leu	Glu	Ala	Ala	Leu	Gln	Ser
			85						90					95	
Ala	Tyr	Val	Lys	Asn	Leu	Lys	Lys	Gly	Asn	Ile	Val	Lys	Gly	Met	Arg
			100					105					110		
Glu	Leu	Arg	Glu	Val	Leu	Arg	Thr	Val	Glu	Thr	Lys	Ala	Thr	Gln	Asn
			115				120					125			
Phe	Lys	Val	Met	Ala	Ala	Lys	His	Leu	Ala	Gly	Val	Leu	Leu	His	Ser
			130				135					140			
Leu	Ser	Gly	Val	Leu	Leu	Glu	Pro	Pro	Val	Pro	Pro	Ser	Ala		

145

150

155

<210> 2275

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2275

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<210> 2276

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2276

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Lys Pro Ser Val Ser Ala Phe Thr His Ser Pro Pro Glu Asn Thr Thr
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Gly Ile Ser Ser Thr Ile Ser Phe His Ser Arg Thr Leu Asn Leu Thr
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Asp Val Ile Glu Glu Leu Ala Gln Ala Ser Thr Gln Thr Leu Lys Ser
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Thr Ile Ala Ser Glu Thr Thr Leu Ser Lys Ser His Gln Ser Thr
100 105 110
Thr Thr Arg Lys Ala Ile Ile Arg His Ser Thr Ile Pro Pro Phe Leu
115 120 125
Ser Ser Ser Ala Thr Leu Ile Pro Val Pro Ile Ser Pro Pro Phe Thr

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 <213> Homo sapiens

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<210> 2278
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<400> 2278
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 Ser Leu Leu Ser Pro Tyr Pro Val Leu Pro Ser Pro Ser Cys Lys Val
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 <211> 331
 <212> DNA
 <213> Homo sapiens

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 35 40 45
 Pro Ala Val Leu Phe Ser Phe Leu His Cys Ala Phe Val Ser Phe Leu
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 300

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 35 40 45
 Asn Phe Gln Glu Gly Gly Gln Leu Ala Ser Ala Ala Pro Asp Leu Trp
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 Asp Ile Leu Thr His Cys Glu His Asp Tyr Gly Glu Thr Thr Thr Arg
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<210> 2283
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 <212> DNA
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<210> 2284
 <211> 122
 <212> PRT
 <213> Homo sapiens

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Gln	Ala	Phe	Gly	Arg	Ala	Val	Ile	Arg	Leu	Pro	Ala	Lys	Ala	Gln	Ala
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<211> 6505

<212> DNA

<213> Homo sapiens

<400> 2285

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<210> 2286

<211> 1784

<212> PRT

<213> Homo sapiens

<400> 2286

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420	425	430
Arg Cys Ser Arg Gln Tyr Ile Thr Arg Phe Leu Asp Arg Gly Trp Gly		
435	440	445
Leu Cys Leu Asp Asp Pro Pro Ala Lys Asp Ile Ile Asp Phe Pro Ser		
450	455	460
Val Pro Pro Gly Val Leu Tyr Asp Val Ser His Gln Cys Arg Leu Gln		
465	470	475
Tyr Gly Ala Tyr Ser Ala Phe Cys Glu Asp Met Asp Asn Val Cys His		
485	490	495
Thr Leu Trp Cys Ser Val Gly Thr Thr Cys His Ser Lys Leu Asp Ala		
500	505	510
Ala Val Asp Gly Thr Arg Cys Gly Glu Asn Lys Trp Cys Leu Ser Gly		
515	520	525
Glu Cys Val Pro Val Gly Phe Arg Pro Glu Ala Val Asp Gly Gly Trp		
530	535	540
Ser Gly Trp Ser Ala Trp Ser Ile Cys Ser Arg Ser Cys Gly Met Gly		
545	550	555
Val Gln Ser Ala Glu Arg Gln Cys Thr Gln Pro Thr Pro Lys Tyr Lys		
565	570	575
Gly Arg Tyr Cys Val Gly Glu Arg Lys Arg Phe Arg Leu Cys Asn Leu		
580	585	590
Gln Ala Cys Pro Ala Gly Arg Pro Ser Phe Arg His Val Gln Cys Ser		
595	600	605
His Phe Asp Ala Met Leu Tyr Lys Gly Gln Leu His Thr Trp Val Pro		
610	615	620
Val Val Asn Asp Val Asn Pro Cys Glu Leu His Cys Arg Pro Ala Asn		

625					630					635				640	
Glu	Tyr	Phe	Ala	Lys	Lys	Leu	Arg	Asp	Ala	Val	Val	Asp	Gly	Thr	Pro
				645					650					655	
Cys	Tyr	Gln	Val	Arg	Ala	Ser	Arg	Asp	Leu	Cys	Ile	Asn	Gly	Ile	Cys
				660				665					670		
Lys	Asn	Val	Gly	Cys	Asp	Phe	Glu	Ile	Asp	Ser	Gly	Ala	Met	Glu	Asp
		675					680					685			
Arg	Cys	Gly	Val	Cys	His	Gly	Asn	Gly	Ser	Thr	Cys	His	Thr	Val	Ser
	690					695					700				
Gly	Thr	Phe	Xaa	Arg	Arg	Pro	Arg	Val	Xaa	Gly	Tyr	Val	Asp	Val	Gly
705					710					715					720
Leu	Ile	Pro	Ala	Gly	Ala	Arg	Glu	Ile	Arg	Ile	Gln	Glu	Val	Ala	Glu
				725					730					735	
Ala	Ala	Asn	Phe	Leu	Ala	Leu	Arg	Ser	Glu	Asp	Pro	Glu	Lys	Tyr	Phe
				740				745					750		
Leu	Asn	Gly	Gly	Trp	Thr	Ile	Gln	Trp	Asn	Gly	Asp	Tyr	Gln	Val	Ala
		755					760				765				
Gly	Thr	Thr	Phe	Thr	Tyr	Ala	Arg	Arg	Gly	Asn	Trp	Glu	Asn	Leu	Thr
	770					775					780				
Ser	Pro	Gly	Pro	Thr	Lys	Glu	Pro	Val	Trp	Ile	Gln	Val	Pro	Ala	Ser
785					790					795					800
Arg	Gly	Pro	Gly	Gly	Gly	Ser	Arg	Gly	Gly	Val	Pro	Arg	Pro	Ser	Thr
				805					810					815	
Leu	His	Gly	Arg	Ser	Arg	Pro	Gly	Gly	Val	Ser	Pro	Gly	Ser	Val	Thr
			820					825				830			
Glu	Pro	Gly	Ser	Glu	Pro	Gly	Pro	Pro	Ala	Ala	Ala	Ser	Thr	Ser	Val
		835				840					845				
Ser	Pro	Ser	Leu	Lys	Trp	Pro	Asn	Leu	Val	Ala	Ala	Val	His	Arg	Gly
	850					855					860				
Gly	Trp	Gly	Gln	Ala	Pro	Leu	Gly	Leu	Gly	Gly	Trp	Arg	Arg	His	Leu
865					870					875					880
Val	Leu	Met	Gly	Pro	Arg	Leu	Pro	Thr	Gln	Leu	Leu	Phe	Gln	Glu	Ser
				885					890					895	
Asn	Pro	Gly	Val	His	Tyr	Glu	Tyr	Thr	Ile	His	Arg	Glu	Ala	Gly	Gly
			900					905					910		
His	Asp	Glu	Val	Pro	Pro	Pro	Val	Phe	Ser	Trp	His	Tyr	Gly	Pro	Trp
	915						920					925			
Thr	Lys	Cys	Thr	Val	Thr	Cys	Gly	Arg	Gly	Val	Gln	Arg	Gln	Asn	Val
	930					935					940				
Tyr	Cys	Leu	Glu	Arg	Gln	Ala	Gly	Pro	Val	Asp	Glu	Glu	His	Cys	Asp
945					950					955					960
Pro	Leu	Gly	Arg	Pro	Asp	Asp	Gln	Gln	Arg	Lys	Cys	Ser	Glu	Gln	Pro
				965				970						975	
Cys	Pro	Ala	Arg	Trp	Trp	Ala	Gly	Glu	Trp	Gln	Leu	Cys	Ser	Ser	Ser
			980					985					990		
Cys	Gly	Pro	Gly	Gly	Leu	Ser	Arg	Arg	Ala	Val	Leu	Cys	Ile	Arg	Ser
	995						1000				1005				
Val	Gly	Leu	Asp	Glu	Gln	Ser	Ala	Leu	Glu	Pro	Pro	Ala	Cys	Glu	His
	1010					1015					1020				
Leu	Pro	Arg	Pro	Pro	Thr	Glu	Thr	Pro	Cys	Asn	Arg	His	Val	Pro	Cys
1025					1030					1035					1040
Pro	Ala	Thr	Trp	Ala	Val	Gly	Asn	Trp	Ser	Gln	Cys	Ser	Val	Thr	Cys
				1045					1050					1055	
Gly	Glu	Gly	Thr	Gln	Arg	Arg	Asn	Val	Leu	Cys	Thr	Asn	Asp	Thr	Gly

1060	1065	1070
Val Pro Cys Asp Glu Ala Gln Gln Pro Ala Ser Glu Val Thr Cys Ser		
1075	1080	1085
Leu Pro Leu Cys Arg Trp Pro Leu Gly Thr Leu Gly Pro Glu Gly Ser		
1090	1095	1100
Gly Ser Gly Ser Ser Ser His Glu Leu Phe Asn Glu Ala Asp Phe Ile		
1105	1110	1115
Pro His His Leu Ala Pro Arg Pro Ser Pro Ala Ser Ser Pro Lys Pro		
1125	1130	1135
Gly Thr Met Gly Asn Ala Ile Glu Glu Glu Ala Pro Glu Leu Asp Leu		
1140	1145	1150
Pro Gly Pro Val Phe Val Asp Asp Phe Tyr Tyr Asp Tyr Asn Phe Ile		
1155	1160	1165
Asn Phe His Glu Asp Leu Ser Tyr Gly Pro Ser Glu Glu Pro Asp Leu		
1170	1175	1180
Asp Leu Ala Gly Thr Gly Asp Arg Thr Pro Pro Pro His Ser His Pro		
1185	1190	1195
Ala Ala Pro Ser Thr Gly Ser Pro Val Pro Ala Thr Glu Pro Pro Ala		
1205	1210	1215
Ala Lys Glu Glu Gly Val Leu Gly Pro Trp Ser Pro Ser Pro Trp Pro		
1220	1225	1230
Ser Gln Ala Gly Arg Ser Pro Pro Pro Ser Glu Gln Thr Pro Gly		
1235	1240	1245
Asn Pro Leu Ile Asn Phe Leu Pro Glu Glu Asp Thr Pro Ile Gly Ala		
1250	1255	1260
Pro Asp Leu Gly Leu Pro Ser Leu Ser Trp Pro Arg Val Ser Thr Asp		
1265	1270	1275
Gly Leu Gln Thr Pro Ala Thr Pro Glu Ser Gln Asn Asp Phe Pro Val		
1285	1290	1295
Gly Lys Asp Ser Gln Ser Gln Leu Pro Pro Pro Trp Arg Asp Arg Thr		
1300	1305	1310
Asn Glu Val Phe Lys Asp Asp Glu Glu Pro Lys Gly Arg Gly Ala Pro		
1315	1320	1325
His Leu Pro Pro Arg Pro Ser Ser Thr Leu Pro Pro Leu Ser Pro Val		
1330	1335	1340
Gly Ser Thr His Ser Ser Pro Ser Pro Asp Val Ala Glu Leu Trp Thr		
1345	1350	1355
Gly Gly Thr Val Ala Trp Glu Pro Ala Leu Glu Gly Gly Leu Gly Pro		
1365	1370	1375
Val Asp Ser Glu Leu Trp Pro Thr Val Gly Val Ala Ser Leu Leu Pro		
1380	1385	1390
Pro Pro Ile Ala Pro Leu Pro Glu Met Lys Val Arg Asp Ser Ser Leu		
1395	1400	1405
Glu Pro Gly Thr Pro Ser Phe Pro Ala Pro Gly Pro Gly Ser Trp Asp		
1410	1415	1420
Leu Gln Thr Val Ala Val Trp Gly Thr Phe Leu Pro Thr Thr Leu Thr		
1425	1430	1435
Gly Leu Gly His Met Pro Glu Pro Ala Leu Asn Pro Gly Pro Lys Gly		
1445	1450	1455
Gln Pro Glu Ser Leu Ser Pro Glu Val Pro Leu Ser Ser Arg Leu Leu		
1460	1465	1470
Ser Thr Pro Ala Trp Asp Ser Pro Ala Asn Ser His Arg Val Pro Glu		
1475	1480	1485
Thr Gln Pro Leu Ala Pro Ser Leu Ala Glu Ala Gly Pro Pro Ala Asp		

1490 1495 1500
 Pro Leu Val Val Arg Asn Ala Ser Trp Gln Ala Gly Asn Trp Ser Glu
 1505 1510 1515 1520
 Cys Ser Thr Thr Cys Gly Leu Gly Ala Val Trp Arg Pro Val Arg Cys
 1525 1530 1535
 Ser Ser Gly Arg Asp Glu Asp Cys Ala Pro Ala Gly Arg Pro Gln Pro
 1540 1545 1550
 Ala Arg Arg Cys His Leu Arg Pro Cys Ala Thr Trp His Ser Gly Asn
 1555 1560 1565
 Trp Ser Lys Cys Ser Arg Ser Cys Gly Gly Gly Ser Ser Val Arg Asp
 1570 1575 1580
 Val Gln Cys Val Asp Thr Arg Asp Leu Arg Pro Leu Arg Pro Phe His
 1585 1590 1595 1600
 Cys Gln Pro Gly Pro Ala Lys Pro Pro Ala His Arg Pro Cys Gly Ala
 1605 1610 1615
 Gln Pro Cys Leu Ser Trp Tyr Thr Ser Ser Trp Arg Glu Cys Ser Glu
 1620 1625 1630
 Ala Cys Gly Gly Gly Glu Gln Gln Arg Leu Val Thr Cys Pro Glu Pro
 1635 1640 1645
 Gly Leu Cys Glu Glu Ala Leu Arg Pro Asn Thr Thr Arg Pro Cys Asn
 1650 1655 1660
 Thr His Pro Cys Thr Gln Trp Val Val Gly Pro Trp Gly Gln Cys Ser
 1665 1670 1675 1680
 Ala Pro Cys Gly Gly Val Gln Arg Arg Leu Val Lys Cys Val Asn
 1685 1690 1695
 Thr Gln Thr Gly Leu Pro Glu Glu Asp Ser Asp Gln Cys Gly His Glu
 1700 1705 1710
 Ala Trp Pro Glu Ser Ser Arg Pro Cys Gly Thr Glu Asp Cys Glu Pro
 1715 1720 1725
 Val Glu Pro Pro Arg Cys Glu Arg Asp Arg Leu Ser Phe Gly Phe Cys
 1730 1735 1740
 Glu Thr Leu Arg Leu Leu Gly Arg Cys Gln Leu Pro Thr Ile Arg Thr
 1745 1750 1755 1760
 Gln Cys Cys Arg Ser Cys Ser Pro Pro Ser His Gly Ala Pro Ser Arg
 1765 1770 1775
 Gly His Gln Arg Val Ala Arg Arg
 1780

<210> 2287

<211> 750

<212> DNA

<213> Homo sapiens

<400> 2287

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 60
 tggcctataa aagtatcatc atccccattt tacagaatgg gaaagtaagg cgtggggagg
 120
 ttgaggacat ttgtacagag tcaggtaact ggaggaactg gactacaacc ctgctcagtg
 180
 cageccagtgt gactgagcgc ctcttgagag ccagggtgat tctgccctca aggatccatg
 240
 ctctggggcaa gaaacccacc catcagcagg tggcttctgc tgagccacaa caggcacaca
 300

gaggggtcca tgggagccca gaggggagca tctgaccagg ctcaggggaa ggaatgtgtc
 360
 cagcagagtc acagaggagc agtatgagtt agccaggtag gggacattcc aggcagggga
 420
 gcagcaggac aaaagcatag aggtagcact gccagtgccca agttccaaaa taagaggctg
 480
 actgctacag ggtccatata ggaaaataat gggaaataca tttggacagg aggtgggggtc
 540
 tgtaacaaag gactttaatt ccagggttaag gaatctggat gttaaaacaa cattagctgc
 600
 catttctaca gtgctacttc ccaggctctg tgcctttctg ggagccttga aggtttgtga
 660
 gctggaagga gatattagga acaaaacgat gcatgaggat agctcaggta aaggttattg
 720
 ataagtaaga atgcctggca ccaaacgcgt
 750

<210> 2288

<211> 142

<212> PRT

<213> Homo sapiens

<400> 2288

Met	Ala	Ala	Asn	Val	Val	Leu	Thr	Ser	Arg	Phe	Leu	Asn	Leu	Glu	Leu
1			5						10					15	
Lys	Ser	Phe	Val	Thr	Asp	Pro	Thr	Ser	Cys	Pro	Asn	Val	Phe	Pro	Ile
			20					25					30		
Ile	Phe	Leu	Tyr	Gly	Pro	Cys	Ser	Ser	Gln	Pro	Leu	Ile	Leu	Glu	Leu
		35					40					45			
Gly	Thr	Gly	Ser	Ala	Thr	Ser	Met	Leu	Leu	Ser	Cys	Cys	Ser	Pro	Ala
	50					55					60				
Trp	Asn	Val	Pro	Tyr	Leu	Ala	Asn	Ser	Tyr	Cys	Ser	Ser	Val	Thr	Leu
65					70					75				80	
Leu	Asp	Thr	Phe	Leu	Pro	Leu	Ser	Leu	Val	Arg	Cys	Ser	Pro	Leu	Gly
			85						90					95	
Ser	His	Gly	Pro	Leu	Cys	Val	Pro	Val	Val	Ala	Gln	Gln	Lys	Pro	Pro
			100					105					110		
Ala	Asp	Gly	Trp	Val	Ser	Cys	Pro	Glu	His	Gly	Ser	Leu	Arg	Ala	Glu
		115					120					125			
Ser	Thr	Trp	Leu	Ser	Gly	Gly	Ala	Gln	Ser	His	Trp	Leu	His		
	130					135						140			

<210> 2289

<211> 381

<212> DNA

<213> Homo sapiens

<400> 2289

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 60
 ccgagcgccg ccgcctccgg catggatcat tgcgtgacgg tggagcgcg gctggagaag
 120
 gtgctgcaca agttctcggg ctacgggcag ctgtgcgagc gcggcctgga ggagctcatc
 180

gactacaccg gcggtctcaa gcaccagatc ctgcagagcc acggccaaga tgctgaatta
 240
 tcaggacac tttcacttgt tttgacacag ggctgtaaaa gaataanaag gggatactgg
 300
 ttcaaaaatt ggctccgac cacaaagaca tccacagcag tgtttctcgg gttggaaaag
 360
 ccattgatga ggattcactt t
 381

<210> 2290

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2290

Met	Asp	His	Cys	Val	Thr	Val	Glu	Arg	Glu	Leu	Glu	Lys	Val	Leu	His
1				5					10					15	
Lys	Phe	Ser	Gly	Tyr	Gly	Gln	Leu	Cys	Glu	Arg	Gly	Leu	Glu	Glu	Leu
			20				25					30			
Ile	Asp	Tyr	Thr	Gly	Gly	Leu	Lys	His	Gln	Ile	Leu	Gln	Ser	His	Gly
			35			40					45				
Gln	Asp	Ala	Glu	Leu	Ser	Gly	Thr	Leu	Ser	Leu	Val	Leu	Thr	Gln	Gly
			50			55				60					
Cys	Lys	Arg	Ile	Xaa	Arg	Gly	Tyr	Trp	Phe	Lys	Asn	Trp	Pro	Pro	Thr
65					70					75				80	
Thr	Lys	Thr	Ser	Thr	Ala	Val	Phe	Leu	Gly	Leu	Glu	Lys	Pro	Leu	Met
			85					90						95	
Arg	Ile	His	Phe												
			100												

<210> 2291

<211> 573

<212> DNA

<213> Homo sapiens

<400> 2291

gcatgctcta ccgcaaagtc ggggtccccac cgattaaaaa tgcccgggtc gaggacagcc
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 ttccggcagca ccgactcatt atcggcaccg acctagtcaa ttgccaccac ctgcttatgc
 120
 aagtggtcga tagaagcccc agccggctta agccagttct ggaaaaccac cacatatcgc
 180
 acatgttcgt tgtgacgatg cagctgagcc attgaatcga cggtcagcgc catgaacgcc
 240
 cgatgctcgt tgacggtaag actcggcgac ccagcaacgt cggcggttgt cgtgccctca
 300
 tcgggtgtaat ggcgacgagc gacgatgacg tcatgtccgc cggcaaagaa ggctgcggaa
 360
 gctcgcgta attcttgggg accgaggtcc tcggcgcgcc ggtctgacct caccgccttg
 420
 aacttggcgt taaggaccga cctcacgtga gcctccctg acgggttaga caggattatcc
 480
 tcctgccagt cccgcgctgc ccgaggcaag ctcatcccc agttgagctg ccaataccgc
 540

cacgacagga tctcgaaaag attggggacg cgt
573

<210> 2292
<211> 140
<212> PRT
<213> Homo sapiens

<400> 2292
Met Ser Leu Pro Arg Ala Ala Arg Asp Trp Gln Glu Glu Tyr Leu Ser
1 5 10 15
Asn Pro Ser Gly Glu Ala His Val Arg Ser Val Leu Asn Ala Lys Phe
20 25 30
Lys Ala Val Gly Ser Asp Arg Arg Ala Glu Asp Leu Gly Pro Gln Glu
35 40 45
Leu Arg Glu Ala Ser Ala Ala Phe Phe Ala Gly Gly His Asp Val Ile
50 55 60
Val Ala Arg Arg His Tyr Thr Asp Glu Gly Thr Thr Thr Ala Asp Val
65 70 75 80
Ala Gly Ser Ala Ser Leu Thr Val Asn Glu His Arg Ala Phe Met Ala
85 90 95
Leu Thr Val Asp Ser Met Ala Gln Leu His Arg His Asn Glu His Val
100 105 110
Arg Tyr Val Val Phe Gln Asn Trp Leu Lys Pro Ala Gly Ala Ser
115 120 125
Ile Asp His Leu His Lys Gln Val Val Ala Ile Asp
130 135 140

<210> 2293
<211> 358
<212> DNA
<213> Homo sapiens

<400> 2293
acgcgtgaag gaatggaagc tgctctcgtc ggtgcacaca agactggcgg gtgcccattg
60
gtgaacactg tgcctaagaa ctggttgaac cggctcaaca cgccggatat gaaaccact
120
gaggagatca agcggcagtt ccaaggctctg cattgggttg gacgtaagta tgggctcaac
180
cacggagagt tctatcttga cgacgagcag tggggccacgc tcatggccgg gtctctcttc
240
gaggcgaatc cgcgcattaa gagcaacttt gattccgagg gcgctgttgt ggatccggat
300
tccgattcac ttgctggggc tgatcgagat gcccgaggtg cttcggatgc atgccttc
358

<210> 2294
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2294
Met Glu Ala Ala Leu Val Gly Ala His Lys Thr Gly Gly Cys Pro Leu

1	5	10	15
Val Asn Thr	Val Ala Lys Asn Trp	Leu Asn Arg	Leu Asn Thr Pro Asp
20	25	30	
Met Lys Pro Thr	Glu Glu Ile Lys Arg	Gln Phe Gln Gly	Leu His Trp
35	40	45	
Leu Gly Arg Lys	Tyr Gly Leu Asn His	Gly Glu Phe Tyr	Leu Asp Asp
50	55	60	
Glu Gln Trp Ala	Thr Leu Met Ala Gly	Ser Ser Phe Glu	Ala Asn Pro
65	70	75	80
Arg Ile Lys Ser	Asn Phe Asp Ser Glu	Gly Ala Val Val	Asp Pro Asp
85	90	95	
Ser Asp Ser Leu	Ala Gly Ala Asp Arg	Asp Ala Arg Gly	Ala Ser Asp
100	105	110	
Ala Cys Leu			
115			

<210> 2295

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2295

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ggggcgtatg gctgctcggg cattaccgca ctggtagcgc aaaatacgcg cggcgtgcag
120
tcgggtgtatc gtatcgaacc ggattttgtc ggtgcacaac tggactctgt gttcagcgat
180
gtccgcattg attccaccaa aatcggcatg ctggcagagg cggatatcgt ggaagcggtc
240
gaggagcgcc tcaaacatta tcgcgttaaa aacgtggtac ttgatacggg gatgctggcg
300
aaaagtggcg atccgctgct atctcctgct gctgtcgaaa ctctgcgaaa acaccttctg
360
ccacacgtcg cgctgatcac gccaaatttg cggaggcgcg cggcgtgct ggatgcgcct
420
catgcccgta ccgagcacga gatgaaagag caggggcgcg cacttctggc gcttggctgc
480
gaggcagtgc tgatgaaagg cggccatctt gacgatcctg agagcccgga ctggctcttc
540
acgcgt
546

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<210> 2296

<211> 182

<212> PRT

<213> Homo sapiens

<400> 2296

Gly Thr Asp	Pro Ser Gly Gly	Ala Gly Ile Arg	Xaa Asp Leu	Xaa Thr
1	5	10	15	
Phe Ser Ala	Leu Gly Ala Tyr	Gly Cys Ser Val	Ile Thr Ala	Leu Val
20	25	30		
Ala Gln Asn	Thr Arg Gly Val	Gln Ser Val Tyr	Arg Ile Glu	Pro Asp

```

          35          40          45
Phe Val Gly Ala Gln Leu Asp Ser Val Phe Ser Asp Val Arg Ile Asp
  50          55          60
Ser Thr Lys Ile Gly Met Leu Ala Glu Ala Asp Ile Val Glu Ala Val
  65          70          75          80
Ala Glu Arg Leu Lys His Tyr Arg Val Lys Asn Val Val Leu Asp Thr
          85          90          95
Val Met Leu Ala Lys Ser Gly Asp Pro Leu Leu Ser Pro Ala Ala Val
          100          105          110
Glu Thr Leu Arg Lys His Leu Leu Pro His Val Ala Leu Ile Thr Pro
          115          120          125
Asn Leu Pro Glu Ala Ala Ala Leu Leu Asp Ala Pro His Ala Arg Thr
          130          135          140
Glu His Glu Met Lys Glu Gln Gly Arg Ala Leu Leu Ala Leu Gly Cys
          145          150          155          160
Glu Ala Val Leu Met Lys Gly Gly His Leu Asp Asp Pro Glu Ser Pro
          165          170          175
Asp Trp Leu Phe Thr Arg
          180

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<210> 2297

<211> 414

<212> DNA

<213> Homo sapiens

<400> 2297

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gggaattccg ggcccttccc cccaagcccg ggtaattttt tgtattttta aaaaaaagg
  60
gaattttccc acgttggggg ggggggggttc ggactttttc ccccaaaaac ccccccccc
  120
caccctccca aaggccgaaa agcagggcca aaaccccccg gacccccccc ggggggggca
  180
aaaggaaaaa cccctttttt tttttttttt ttttatacac atgaggggtct ctgggtaata
  240
aatgttgaga tgtaggggta ggtgagatta aacaggttct ttttttcattg atttctcgga
  300
gtctttatga tgctccacac cagtacttct caaagctgac tgtgtataca aaactactggg
  360
gatctgaccc acatgtaaag tctgatttct ttgggtctggg gcaggcctga aatn
  414

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<210> 2298

<211> 67

<212> PRT

<213> Homo sapiens

<400> 2298

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Lys Lys Arg Glu Phe Ser His Val Gly Gly Gly Gly Phe Gly Leu Phe
  1          5          10          15
Pro Pro Lys Thr Pro Pro Pro His Pro Pro Lys Gly Arg Lys Ala Gly
          20          25          30
Pro Lys Pro Pro Gly Pro Pro Pro Gly Gly Ala Lys Gly Lys Thr Pro
          35          40          45
Phe Phe Phe Phe Phe Tyr Thr His Glu Gly Leu Trp Leu Ile Asn

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50
Val Glu Met
65

55

60

<210> 2299
<211> 987
<212> DNA
<213> Homo sapiens

<400> 2299
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ccgctttcac tcttcgaatt tgtgcttagc tcttttcttg taccctgcga ctctgaccca
120
acatgctgtg atgtgtgccg agggaggaat tggtcagcta cacaacctgg atcttaccac
180
agtttgata tgactgaggc tctccaatgg gccagatata actggcgacg gctgatcaga
240
ggtgcaacca gggatgatga ttcagggcca tacaactatt cctcgttgct cgctgtggg
300
cgcaagtcct ctcagatccc taaactgtca ggaaggcacc ggattgttgt tccccacata
360
cagcccttca aggatgagta tgagaagttc tccggagcct atgtgaacaa tcgaatacga
420
acaacaaagt acacacttct gaattttgtg ccaagaaatt tatttgaaca atttcacaga
480
gctgccaaat tatatttcct gttcctagtt gtcctgaact gggtagcctt ggtagaagcc
540
ttccaaaagg aaatcaccat gttgcctctg gtgggtggcc ttacaattat cgcaattaaa
600
gatggcctgg aagattatcg gaaatacaaa attgacaaac agatcaataa ttaataact
660
aaagtttata gtaggaaaga gaaaaaatac attgaccgat gctggaaaga cgttactgtt
720
ggggacttta ttcgcctctc ctgcaacgag gtcctcctg cagacatggt actactcttt
780
tccactgata cagatggaat ctgtcacatt gagacttctg gtcttgatgg agagagcaat
840
ttaaaacaga ggcagggtgg tccgggatat gcagaacagg actctgaagt tgatcctgag
900
aagttttcca gtaggataga atgtgaaagc ccaaacaatg acctcagcag attccgaggc
960
ttcctagaac attccaacaa agaacgc
987

<210> 2300
<211> 266
<212> PRT
<213> Homo sapiens

<400> 2300
Met Thr Glu Ala Leu Gln Trp Ala Arg Tyr His Trp Arg Arg Leu Ile
1 5 10 15
Arg Gly Ala Thr Arg Asp Asp Asp Ser Gly Pro Tyr Asn Tyr Ser Ser

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<210> 2301
<211> 390
<212> DNA
<213> Homo sapiens
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<210> 2302

<211> 130
 <212> PRT
 <213> Homo sapiens

<400> 2302
 Tyr Pro Lys Arg Phe Lys Phe Asp Ala Asp Glu Phe Tyr Leu Lys Ser
 1 5 10 15
 Ser Glu Glu Met Xaa Ala Thr Ser Ser Ala Xaa Phe Pro Glu Ala Cys
 20 25 30
 Asp Asn Thr Met Glu Ile Ala Glu Xaa Val Ala Thr Leu Asn Ser Thr
 35 40 45
 Gln Thr Gln Xaa Tyr Met Pro Asp Phe Pro Thr Pro Glu Gly Glu Asn
 50 55 60
 Glu Glu Ser Trp Phe Val Lys Glu Val Glu Arg Gly Leu His Tyr Arg
 65 70 75 80
 Phe Pro Glu Gly Ile Pro Asp Asp Val Arg Lys Gln Ala Asp Tyr Glu
 85 90 95
 Val Gly Ile Ile Thr Gln Met Gly Phe Pro Gly Tyr Phe Leu Val Val
 100 105 110
 Ala Asp Phe Ile Asn Trp Ala Lys Asn Asn Gly Ile Arg Val Gly Pro
 115 120 125
 Gly Arg
 130

<210> 2303
 <211> 638
 <212> DNA
 <213> Homo sapiens

<400> 2303
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 60
 gcacctgtgt ttggctacct gggcgaccga catagccgca aggctaccat gagcttcggg
 120
 atcttgctgt ggtcaggagc tggcctctct agctccttca tctccccccg gtattcttgg
 180
 ctctttcttc tgtcccgagg catcgagggc actggctcgg ccagctactc caccatcgcg
 240
 cccaccgtcc tgggcgacct ctctgtgagg gaccagcgca cccgcgtgct ggctgtcttc
 300
 tacatcttta tccccgttgg aagtggctctg ggctacgtgc tggggtcggc tgtgacgatg
 360
 ctgactggga actggcgctg gggcctccga gtcatgccct gcctggaggc cgtggccttg
 420
 atctgtctta tctgtctggt tccagaccca ccccggggag ctgccgagac acagggggag
 480
 ggggcccgtg gaggcttcag aagcagctgg tgtgaggacg tcagatacct ggggaaaaac
 540
 tggagttttg tgtggtcgac cctcggagtg accgccatgg cctttgtgac tggagccctg
 600
 gggttctggg cccccaagtt tctgctcgag gcacgcgt
 638

<210> 2304

<211> 212
 <212> PRT
 <213> Homo sapiens

<400> 2304
 Xaa Asp Pro Gly Cys Pro Cys Val Ser Pro Ser Val Phe Val Ser Cys
 1 5 10 15
 Leu Leu Leu Ser Ala Pro Val Phe Gly Tyr Leu Gly Asp Arg His Ser
 20 25 30
 Arg Lys Ala Thr Met Ser Phe Gly Ile Leu Leu Trp Ser Gly Ala Gly
 35 40 45
 Leu Ser Ser Ser Phe Ile Ser Pro Arg Tyr Ser Trp Leu Phe Phe Leu
 50 55 60
 Ser Arg Gly Ile Glu Gly Thr Gly Ser Ala Ser Tyr Ser Thr Ile Ala
 65 70 75 80
 Pro Thr Val Leu Gly Asp Leu Phe Val Arg Asp Gln Arg Thr Arg Val
 85 90 95
 Leu Ala Val Phe Tyr Ile Phe Ile Pro Val Gly Ser Gly Leu Gly Tyr
 100 105 110
 Val Leu Gly Ser Ala Val Thr Met Leu Thr Gly Asn Trp Arg Trp Ala
 115 120 125
 Leu Arg Val Met Pro Cys Leu Glu Ala Val Ala Leu Ile Leu Leu Ile
 130 135 140
 Leu Leu Val Pro Asp Pro Pro Arg Gly Ala Ala Glu Thr Gln Gly Glu
 145 150 155 160
 Gly Ala Val Gly Gly Phe Arg Ser Ser Trp Cys Glu Asp Val Arg Tyr
 165 170 175
 Leu Gly Lys Asn Trp Ser Phe Val Trp Ser Thr Leu Gly Val Thr Ala
 180 185 190
 Met Ala Phe Val Thr Gly Ala Leu Gly Phe Trp Ala Pro Lys Phe Leu
 195 200 205
 Leu Glu Ala Arg
 210

<210> 2305
 <211> 340
 <212> DNA
 <213> Homo sapiens

<400> 2305
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 tcggaccagc acacttttgac cgtcgtgggc gcctcgtgac atggggtaac gcgaacctcg
 120
 tcgtctctgt tcttgacctc ttccgtgccc ccattgacaa cgatcgggca agttcactgg
 180
 cccgcaacgc tattggtgac gcagcactcg cagctgggtc cgaccgactc gtccacacca
 240
 cggcgctcggg gcgcgacgag ggcgatgagt tggctcgtcgt tactcgcagc gctgctgccg
 300
 ccgcacgcaa ttccatgacg acaacgtgga gttggcgcgc
 340

<210> 2306

<211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2306
 Met Glu Leu Arg Ala Ala Ala Ala Leu Arg Val Thr Thr Thr Asn
 1 5 10 15
 Ser Ser Pro Ser Ser Arg Thr Asp Ala Val Val Trp Thr Ser Arg Ser
 20 25 30
 Arg Pro Ala Ala Ser Ala Ala Ser Pro Ile Ala Leu Arg Ala Ser Glu
 35 40 45
 Leu Ala Arg Ser Leu Ser Met Gly Ala Arg Lys Arg Ser Arg Thr Gly
 50 55 60
 Ala Thr Arg Phe Ala Leu Pro His Val Thr Arg Arg Pro Arg Arg Ser
 65 70 75 80
 Lys Cys Ala Gly Pro Arg Leu Gln Pro Val Pro Ser Arg Cys Asp Cys
 85 90 95
 Asp Asp Ala Gly Arg
 100

<210> 2307
 <211> 360
 <212> DNA
 <213> Homo sapiens

<400> 2307
 ngcttctcag ctgaaggggg agataaagct ctacataaga tgggtccagg tgggggcaaa
 60
 gccaaaggcac tgggtggggc tggcagtggg agcaagggct cagcaggtgg cggaagcaag
 120
 cgacggctga gcagcgaaga cagctccctg gagccagacc tggccgagat gagcctggat
 180
 gacagcagcc tggccctggg cgcagaggcc aggaccttcg ggggattccc tgagagccct
 240
 ccaccctgtc ctctccacgg tggctcccgga ggcccttcca ctttcccttc tgagccccca
 300
 gatacttatg aagaagatgg tgatgagagt ggcaatgggc ttcccaaaac caaagaggca
 360

<210> 2308
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2308
 Xaa Phe Ser Ala Glu Gly Gly Asp Lys Ala Leu His Lys Met Gly Pro
 1 5 10 15
 Gly Gly Gly Lys Ala Lys Ala Leu Gly Gly Ala Gly Ser Gly Ser Lys
 20 25 30
 Gly Ser Ala Gly Gly Gly Ser Lys Arg Arg Leu Ser Ser Glu Asp Ser
 35 40 45
 Ser Leu Glu Pro Asp Leu Ala Glu Met Ser Leu Asp Asp Ser Ser Leu
 50 55 60
 Ala Leu Gly Ala Glu Ala Arg Thr Phe Gly Gly Phe Pro Glu Ser Pro


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65          70          75          80
Pro Pro Cys Pro Leu His Gly Gly Ser Arg Gly Pro Ser Thr Phe Leu
          85          90          95
Pro Glu Pro Pro Asp Thr Tyr Glu Glu Asp Gly Asp Glu Ser Gly Asn
          100          105          110
Gly Leu Pro Lys Thr Lys Glu Ala
          115          120

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<210> 2309

<211> 395

<212> DNA

<213> Homo sapiens

<400> 2309

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ggatccctac aaatggggcc ctgctctgag cacattccca tgagggtgc ctgccctgtg
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cactctctgc cctggggccgc ggggcctgac tgggttccca cctcctccta cccactgggg
120
tcttttccag caggcacagg gattcctcat gggggaggca gagcccaccc gtctgtcttc
180
ggtgacggcc tgagctgtgc acggcctccc ctgccctcct gttctcaggc cccccagggt
240
ccatccagcc ccagcgtgtg gcgttctggc tcttccctgg agtctcctcc cagaccacgc
300
gactccactc acactgtgcc tagcggactg tgtggttgat gcagccggct cacttgagtg
360
tgttgtgtta tgcccacaac aggettgcgc tcacc
395

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<210> 2310

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2310

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Met Gly Pro Cys Ser Glu His Ile Pro Met Arg Ala Ala Cys Pro Val
1          5          10          15
His Ser Leu Pro Trp Ala Ala Gly Pro Asp Trp Val Pro Thr Ser Ser
          20          25          30
Tyr Pro Leu Gly Ser Phe Pro Ala Gly Thr Gly Ile Pro His Gly Gly
          35          40          45
Gly Arg Ala His Pro Ser Val Leu Gly Asp Gly Leu Ser Cys Ala Arg
          50          55          60
Pro Pro Leu Pro Ser Cys Ser Gln Ala Pro Gln Gly Pro Ser Ser Pro
65          70          75          80
Ser Val Trp Arg Ser Gly Ser Ser Leu Glu Ser Pro Pro Arg Pro Arg
          85          90          95
Asp Ser Thr His Thr Val Pro Ser Gly Leu Cys Gly
          100          105

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<210> 2311

<211> 378

<212> DNA

<213> Homo sapiens

<400> 2311
 gtgcacgccc agatgctgcc gcaagacaag cagcgtgtcg tcggcgagtt gaagcgccag
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 ggcttctcag tgatcaaggt cggcgatggc atcaatgatt ggcacgctct cgcccgggcg
 120
 gatgtcggca gtcccatggg cggcagcgcg gacgtggctc tcgaaacggc cgatgctgcc
 180
 gtccttcacg gacgggtggg ggacgtcttc gcgatgatcg ccctatcgaa gcgaaccatg
 240
 gccaacattc gacagaacat cgcgatcgcg atcgggctaa aggcggtgtt ccttgtaacg
 300
 accgtcgctg gcatcacggg gctttggcct gcaatcctcg ccgatacggg gaccacggag
 360
 cttgtgacca tgaacgcg
 378

<210> 2312
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2312
 Val His Ala Glu Met Leu Pro Gln Asp Lys Gln Arg Val Val Gly Glu
 1 5 10 15
 Leu Lys Arg Gln Gly Phe Ser Val Ile Lys Val Gly Asp Gly Ile Asn
 20 25 30
 Asp Cys Asp Ala Leu Ala Ala Asp Val Gly Ser Pro Met Gly Gly
 35 40 45
 Ser Ala Asp Val Ala Leu Glu Thr Ala Asp Ala Ala Val Leu His Gly
 50 55 60
 Arg Val Gly Asp Val Phe Ala Met Ile Ala Leu Ser Lys Arg Thr Met
 65 70 75 80
 Ala Asn Ile Arg Gln Asn Ile Ala Ile Ala Ile Gly Leu Lys Ala Val
 85 90 95
 Phe Leu Val Thr Thr Val Val Gly Ile Thr Gly Leu Trp Pro Ala Ile
 100 105 110
 Leu Ala Asp Thr Gly Thr Thr Glu Leu Val Thr Met Asn Ala
 115 120 125

<210> 2313
 <211> 669
 <212> DNA
 <213> Homo sapiens

<400> 2313
 ctagtggcat ggtctcgctg gtctttagtg gagcataccg acacatcggt gactcaaacg
 60
 atccgaatca tggctcgctc tggttggcct ggaaccatta acgtacgcct caccatcgc
 120
 ttaagcgacg ccggtctagc tgtcgaagtc accgcgcgca atgtcggtag gacagcgggg
 180
 ccgcttgat acgcagcaca ccctatctc tgtctgggtg gcaccatcga cgactggaca
 240

gtcgacgccc cgtttacctc gtgggttacag gtcgatgac ggctgctacc aatgcagatg
 300
 cgcgagatgg acagcatcca cgcgctgaac ggtctcacgg gcggacagcg caccttcgat
 360
 accgcttaca ccgtgaaagg aggacggaac cgtcggatcg cccgcatggc gtatccgggt
 420
 ctcaacggtg aaacgagcca cgaattgtgg ggcgacgccg cgatgagctg ggtgcaagtc
 480
 tacactccag acgaccgcca cagtctggcc atcgagccaa tgacctgcgg ccagatgca
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 ttcaacggt
 669

<210> 2314

<211> 206

<212> PRT

<213> Homo sapiens

<400> 2314

Leu	Val	Ala	Trp	Ser	Arg	Trp	Ser	Leu	Val	Glu	His	Thr	Asp	Thr	Ser
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Val	Thr	Gln	Thr	Ile	Arg	Ile	Met	Ala	Arg	Pro	Gly	Trp	Pro	Gly	Thr
			20					25					30		
Ile	Asn	Val	Arg	Leu	Thr	His	Arg	Leu	Ser	Asp	Ala	Gly	Leu	Ala	Val
		35					40					45			
Glu	Val	Thr	Ala	Arg	Asn	Val	Gly	Thr	Thr	Ala	Gly	Pro	Leu	Gly	Tyr
	50					55					60				
Ala	Ala	His	Pro	Tyr	Leu	Cys	Leu	Gly	Gly	Thr	Ile	Asp	Asp	Trp	Thr
65					70					75				80	
Val	Asp	Ala	Pro	Phe	Thr	Ser	Trp	Leu	Gln	Val	Asp	Asp	Arg	Leu	Leu
			85						90					95	
Pro	Met	Gln	Met	Arg	Glu	Met	Asp	Ser	Ile	His	Ala	Leu	Asn	Gly	Leu
		100						105					110		
Thr	Gly	Gly	Gln	Arg	Thr	Phe	Asp	Thr	Ala	Tyr	Thr	Val	Lys	Gly	Gly
		115					120					125			
Arg	Asn	Arg	Arg	Ile	Ala	Arg	Met	Ala	Tyr	Pro	Gly	Leu	Asn	Gly	Glu
		130				135					140				
Thr	Ser	His	Glu	Leu	Trp	Gly	Asp	Ala	Ala	Met	Ser	Trp	Val	Gln	Val
145				150						155				160	
Tyr	Thr	Pro	Asp	Asp	Arg	His	Ser	Leu	Ala	Ile	Glu	Pro	Met	Thr	Cys
			165						170					175	
Gly	Pro	Asp	Ala	Phe	Asn	Glu	Gly	Pro	Thr	His	Gly	Asp	Val	Ile	Arg
		180					185					190			
Leu	Glu	Pro	Gly	Asn	Asp	Val	Thr	Leu	His	Trp	Gly	Ile	Ala		
		195					200					205			

<210> 2315

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2315
 nacgcgtccc tcatcgatac cgagcccggg atgggaaaac ggggtgtatcg cgttgaggcc
 60
 acccaaggcc gaccaattcg catcgataag gcggtcgctt atcacacttc tcgcggcgtg
 120
 ccggtacatg aactgtttga ccgagtgcgc cgcagcttag accgagtgcg tgaacagggg
 180
 cacaacgtct actacgacga acagcgtgca tggcttgacg attactgggc aacggctgat
 240
 gttgaggtcg agggtgcccc gaccgggtatt cagcaggtcg tcaggtggaa ccttttccag
 300
 attgctcagg catcagcccg tgcagatcaa cttggcattc cggcaaaggg tgtaaccggg
 360
 tcaggctatg aaggccacta cttttgggac actgagggtt atgtcatccc gatgttgacc
 420
 tacactcatc caagaatcgc tgagaatgcg ctgagattcc ggggtgaatac ccttccgcaa
 480
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 540
 accggt
 546

<210> 2316
 <211> 182
 <212> PRT
 <213> Homo sapiens

<400> 2316
 Xaa Ala Ser Leu Ile Asp Thr Glu Pro Gly Met Gly Lys Arg Val Tyr
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 Arg Val Glu Ala Thr Gln Gly Arg Pro Ile Arg Ile Asp Lys Ala Val
 20 25 30
 Ala Tyr His Thr Ser Arg Gly Val Pro Val His Glu Leu Phe Asp Arg
 35 40 45
 Val Arg Arg Ser Leu Asp Arg Val Arg Glu Gln Gly His Asn Val Tyr
 50 55 60
 Tyr Asp Glu Gln Arg Ala Trp Leu Asp Asp Tyr Trp Ala Thr Ala Asp
 65 70 75 80
 Val Glu Val Glu Gly Ala Pro Thr Gly Ile Gln Gln Ala Val Arg Trp
 85 90 95
 Asn Leu Phe Gln Ile Ala Gln Ala Ser Ala Arg Ala Asp Gln Leu Gly
 100 105 110
 Ile Pro Ala Lys Gly Val Thr Gly Ser Gly Tyr Glu Gly His Tyr Phe
 115 120 125
 Trp Asp Thr Glu Val Tyr Val Ile Pro Met Leu Thr Tyr Thr His Pro
 130 135 140
 Arg Ile Ala Glu Asn Ala Leu Arg Phe Arg Val Asn Thr Leu Pro Gln
 145 150 155 160
 Ala Arg Arg Arg Ala Lys Glu Leu Ser Glu Arg Gly Ala Leu Phe Pro
 165 170 175
 Trp Arg Thr Ile Thr Gly
 180

<210> 2317
 <211> 496
 <212> DNA
 <213> Homo sapiens

<400> 2317
 gccggcgggc tcgggaacgg tcaactgacct gcagcaggca atggcggtcg cggtttaatc
 60
 agggttctctgc acggagtttt ggatagtcgg tccagtcgcc actggcaagg cgcgaccagg
 120
 cagctgctga cgctgctgtg atgccgagga gatcggagac gattcgtggg tgcattctgcc
 180
 gggtcagtgc gatcagcgcg gtcgttcgag cgcttcctga acgcagcccc tgctggcgca
 240
 gacgtcggct gactgggcct ggtgtgagat gcaaccccg attcctgccg gaaagagcc
 300
 atccctcggg tcgggtgtctc gatgtgtcag cgagctcggc gatcgcatte ccgaggacct
 360
 cgggcagttc gattggctcg gtcctgatgg tgagcttccc cggtcgtgat gtcacgtcga
 420
 cctgctcacg ggtgagcgcg acgatgagag tgaggtggag gccgtagagg agcacgagca
 480
 acccagcggc acgcgt
 496

<210> 2318
 <211> 108
 <212> PRT
 <213> Homo sapiens

<400> 2318
 Met Pro Arg Arg Ser Glu Thr Ile Arg Gly Cys Ile Cys Arg Val Ser
 1 5 10 15
 Ser Ile Ser Ala Val Val Arg Ala Leu Pro Glu Arg Ser Pro Cys Trp
 20 25 30
 Arg Arg Arg Arg Leu Ser Gly Pro Gly Val Arg Cys Asn Pro Gly Phe
 35 40 45
 Leu Pro Gly Lys Ser His Pro Ser Gly Arg Cys Leu Asp Val Ser Ala
 50 55 60
 Ser Ser Ala Ile Ala Phe Pro Arg Thr Ser Gly Ser Ser Ile Gly Ser
 65 70 75 80
 Ala Pro Met Val Ser Phe Pro Gly Arg Asp Val Thr Ser Thr Cys Ser
 85 90 95
 Arg Val Ser Ala Thr Met Arg Val Arg Trp Arg Pro
 100 105

<210> 2319
 <211> 1748
 <212> DNA
 <213> Homo sapiens

<400> 2319
 ntgatcaagt ctcggtctct ggattatacc ttgttcctc gaacttggat ctttctctgct
 60

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gaatatactc aattccaaaa ttatgtgaaa gaattgaaga aaaaacggaa gcagaaaact
120
tttatagtga aaccagctaa tgggtgcaatg ggtcatggga tttctttgat aagaaatgg
180
gacaaaacttc catctcagga tcatttgatt gttcaagaat acattgaaaa gcctttccta
240
atggaagggtt acaagtttga cttacgaatt tatattctgg ttacatcgtg tgatccacta
300
aaaatatttc tctaccatga tgggcttggt cgaatgggta cagagaagta cattccacct
360
aatgagtcca atttgaccca gttatacatg catctgacaa actactcgt gaacaagcat
420
aatgagcatt ttgaacggga tgaaactgag aacaaaggca gcaaacttc catcaaagg
480
tttacagaat tccttcaagc aaatcaacat gatgttgcta agttttggag tgatatttca
540
gaattgggtg taaagacctt gattgtagca gaacctcatg tcctgcatgc ctatcgaatg
600
tgtagacctg gtcaacctcc aggaagcgaa agtgtctgct ttgaagtctt gggatttgat
660
atthttgttg atagaaaact aaagccatgg cttctggaga ttaaccgagc cccaagcttt
720
ggaactgatc agaaaataga ctatgatgta aaaaggggag tgctgctaaa tgcgttgaag
780
ctactaaaca taaggaccag tgacaaaaga agaaacttgg ccaaacaaaa agctgaggct
840
caaaggaggc tctatggtca aaattcaatt aaaaggctct taccaggctc ctgagactgg
900
gaacagcaga gacaccagtt ggagaggcgg aaagaagagt tgaaagagag actcgctcaa
960
gtacgaaagc agatctcacg agaagaacat gaaaatcgac atatggggaa ttatagacga
1020
atthtctctc ctgaagataa agcattactt gaaaagtatg aaaatttggt agctgttgcc
1080
tttcagacct tcctttcagg aagagcagct tcattccagc gagagttgaa taatcctttg
1140
aaaaggatga aggaagaaga tattttggat cttctggagc aatgtgaaat tgatgatgaa
1200
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1260
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1320
agcagctctt cagaatctga cgaatgaa aaagaagagt accaaaataa gaaaagagaa
1380
aagcaagtta catataatct taaacctcc aaccactaca aattaattca acaaccagc
1440
tcataagac gtacagtcag ctgccctcgg tccatctctg ctcaatcacc ttccagtggg
1500
gacaccgcc cattttctgc tcaacaaatg atatctgtgt caggccaac ttctgcatct
1560
cggtcacatt ccttaaaccg gggccttcct cctacatgag gcctctgctt cacagtaatg
1620
atgctgctc taccaactct caagtgagt agtctttgct gcaactgaaa acaaaagaa
1680

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aagaagatga tctaacaagt cagaccttat ttgttctcaa agacatgaag atccggtttc
 1740
 caggaaaag
 1748

<210> 2320
 <211> 532
 <212> PRT
 <213> Homo sapiens

<400> 2320
 Xaa Ile Lys Ser Arg Ser Leu Asp Tyr Thr Phe Val Pro Arg Thr Trp
 1 5 10 15
 Ile Phe Pro Ala Glu Tyr Thr Gln Phe Gln Asn Tyr Val Lys Glu Leu
 20 25 30
 Lys Lys Lys Arg Lys Gln Lys Thr Phe Ile Val Lys Pro Ala Asn Gly
 35 40 45
 Ala Met Gly His Gly Ile Ser Leu Ile Arg Asn Gly Asp Lys Leu Pro
 50 55 60
 Ser Gln Asp His Leu Ile Val Gln Glu Tyr Ile Glu Lys Pro Phe Leu
 65 70 75 80
 Met Glu Gly Tyr Lys Phe Asp Leu Arg Ile Tyr Ile Leu Val Thr Ser
 85 90 95
 Cys Asp Pro Leu Lys Ile Phe Leu Tyr His Asp Gly Leu Val Arg Met
 100 105 110
 Gly Thr Glu Lys Tyr Ile Pro Pro Asn Glu Ser Asn Leu Thr Gln Leu
 115 120 125
 Tyr Met His Leu Thr Asn Tyr Ser Val Asn Lys His Asn Glu His Phe
 130 135 140
 Glu Arg Asp Glu Thr Glu Asn Lys Gly Ser Lys Arg Ser Ile Lys Trp
 145 150 155 160
 Phe Thr Glu Phe Leu Gln Ala Asn Gln His Asp Val Ala Lys Phe Trp
 165 170 175
 Ser Asp Ile Ser Glu Leu Val Val Lys Thr Leu Ile Val Ala Glu Pro
 180 185 190
 His Val Leu His Ala Tyr Arg Met Cys Arg Pro Gly Gln Pro Pro Gly
 195 200 205
 Ser Glu Ser Val Cys Phe Glu Val Leu Gly Phe Asp Ile Leu Leu Asp
 210 215 220
 Arg Lys Leu Lys Pro Trp Leu Leu Glu Ile Asn Arg Ala Pro Ser Phe
 225 230 235 240
 Gly Thr Asp Gln Lys Ile Asp Tyr Asp Val Lys Arg Gly Val Leu Leu
 245 250 255
 Asn Ala Leu Lys Leu Leu Asn Ile Arg Thr Ser Asp Lys Arg Arg Asn
 260 265 270
 Leu Ala Lys Gln Lys Ala Glu Ala Gln Arg Arg Leu Tyr Gly Gln Asn
 275 280 285
 Ser Ile Lys Arg Leu Leu Pro Gly Ser Ser Asp Trp Glu Gln Gln Arg
 290 295 300
 His Gln Leu Glu Arg Arg Lys Glu Glu Leu Lys Glu Arg Leu Ala Gln
 305 310 315 320
 Val Arg Lys Gln Ile Ser Arg Glu Glu His Glu Asn Arg His Met Gly
 325 330 335
 Asn Tyr Arg Arg Ile Tyr Pro Pro Glu Asp Lys Ala Leu Leu Glu Lys

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          340          345          350
Tyr Glu Asn Leu Leu Ala Val Ala Phe Gln Thr Phe Leu Ser Gly Arg
          355          360          365
Ala Ala Ser Phe Gln Arg Glu Leu Asn Asn Pro Leu Lys Arg Met Lys
          370          375          380
Glu Glu Asp Ile Leu Asp Leu Leu Glu Gln Cys Glu Ile Asp Asp Glu
385          390          395          400
Lys Leu Met Gly Lys Thr Thr Lys Thr Arg Gly Pro Lys Pro Leu Cys
          405          410          415
Ser Met Pro Glu Ser Thr Glu Ile Met Lys Arg Pro Lys Tyr Cys Ser
          420          425          430
Ser Asp Ser Ser Tyr Asp Ser Ser Ser Ser Ser Ser Glu Ser Asp Glu
          435          440          445
Asn Glu Lys Glu Glu Tyr Gln Asn Lys Lys Arg Glu Lys Gln Val Thr
          450          455          460
Tyr Asn Leu Lys Pro Ser Asn His Tyr Lys Leu Ile Gln Gln Pro Ser
465          470          475          480
Ser Ile Arg Arg Ser Val Ser Cys Pro Arg Ser Ile Ser Ala Gln Ser
          485          490          495
Pro Ser Ser Gly Asp Thr Arg Pro Phe Ser Ala Gln Gln Met Ile Ser
          500          505          510
Val Ser Arg Pro Thr Ser Ala Ser Arg Ser His Ser Leu Asn Pro Gly
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Leu Pro Pro Thr
          530

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<210> 2321

<211> 433

<212> DNA

<213> Homo sapiens

<400> 2321

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caattgtgtg gacgtgtcta tgtgtgtttc taattctata ctatcttgaa aatgggttcag
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cgttctagaa atacagccac ataatttttt ttgttttgaa aaactgctca gcaaatgcat
120
acaggtcata atggcaggta acagaccatt tattgaagtg ctgaaacaaa tagaaaacaa
180
agtccaggac accatcacag agcagtactt cccttgtagag atactctcag ctaagtaaga
240
attgagttag acaacaataa aacaaatacc cataggcttt tcaaacagta acaaccgct
300
cagggttagc agcatttcta gaccttgatg gtaaaatgat gttctcaacc tttgctttca
360
gacactggat cactgcttaa gtagccttta tcttttcccc ctaatttttg ttgaagatgc
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cagaggtgga gtg
433

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<210> 2322

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2322

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 1 5 10 15
 Ile Cys Phe Ile Val Val Ser Leu Asn Ser Tyr Leu Ala Glu Ser Ile
 20 25 30
 Ser Gln Gly Lys Tyr Cys Ser Val Met Val Ser Trp Thr Leu Phe Ser
 35 40 45
 Ile Cys Phe Ser Thr Ser Ile Asn Gly Leu Leu Pro Ala Ile Met Thr
 50 55 60
 Cys Met His Leu Leu Ser Ser Phe Ser Lys Gln Lys Lys Leu Cys Gly
 65 70 75 80
 Cys Ile Ser Arg Thr Leu Asn His Phe Gln Asp Ser Ile Glu Leu Glu
 85 90 95
 Thr His Ile Asp Thr Ser Thr Gln Leu
 100 105

<210> 2323

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2323

acgcgtcaaa actggcaaag ctggcggctt agggggagg gcaagtggac ttggaggccc
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 tctccactg tgcacccctc tggaataaaa gcgaggagg catcaagtaa aagtttcttg
 120
 ccaggcagag ccagctcggc ggccccccgc acatagctgg ggtagcagg ggttgcttct
 180
 ctgccccgca cagcgncttc caggagccag cgggggagag ctgagccaag gccgaaggag
 240
 ccgcctgcgg gcttagccgc cccctccgc cgggtggccc cagagcggac gctgggacgc
 300
 ccgggggtctg gcagctctgc gcccggttag gagcgggcgg gcgagcatta gcctgcgtcc
 360
 tggagaagg ggcagcgcc gcagttgagg ccgaagcagc ccctcgcggg cgtaggatac
 420
 ctgtcagtga gcgcccggat tgcacggccc cgggtagtg cctgccggcg aggggcggga
 480
 gctcgggtga cttggccatc cccatccccg gccagggccc ggagggcggc cg
 532

<210> 2324

<211> 51

<212> PRT

<213> Homo sapiens

<400> 2324

Thr Arg Gln Asn Trp Gln Ser Trp Arg Leu Arg Gly Arg Gly Lys Trp
 1 5 10 15
 Thr Trp Arg Pro Ser Ser Thr Val His Pro Leu Gly Lys Lys Ala Glu
 20 25 30
 Gly Ala Ser Ser Lys Ser Phe Leu Pro Gly Arg Ala Ser Ser Ala Ala
 35 40 45
 Pro Arg Thr

50

<210> 2325
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2325
 nnacgcgtgc aggaccgcat gagcgccatc tgggagagag gagtgggttg aggaaagatg
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 gatgagaacc gttttgtggc cgttaccagt tccaacgcag ctaagcttct gaacctgtat
 120
 ccccgcaagg gccgcattat tcccggagcc gatgctgatg tgggtggtgtg ggaccacagaa
 180
 gccacaaaga ccatctcagc cagcacgcag gtccaggagg gagacttcaa cctgtatgag
 240
 aacatgcgct gccacggcgt gccactggtc accatcagcc gggggcgcgct cgtgtatgag
 300
 aacggcgctct tcatgtgcgc cgagggcacc ggcaagttct gtcccttgag gtccttccca
 360
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 420
 cgcactccct acctggggga tgcgctggt gtcgtgcac
 459

<210> 2326
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2326
 Xaa Arg Val Gln Asp Arg Met Ser Ala Ile Trp Glu Arg Gly Val Val
 1 5 10 15
 Gly Gly Lys Met Asp Glu Asn Arg Phe Val Ala Val Thr Ser Ser Asn
 20 25 30
 Ala Ala Lys Leu Leu Asn Leu Tyr Pro Arg Lys Gly Arg Ile Ile Pro
 35 40 45
 Gly Ala Asp Ala Asp Val Val Val Trp Asp Pro Glu Ala Thr Lys Thr
 50 55 60
 Ile Ser Ala Ser Thr Gln Val Gln Gly Gly Asp Phe Asn Leu Tyr Glu
 65 70 75 80
 Asn Met Arg Cys His Gly Val Pro Leu Val Thr Ile Ser Arg Gly Arg
 85 90 95
 Val Val Tyr Glu Asn Gly Val Phe Met Cys Ala Glu Gly Thr Gly Lys
 100 105 110
 Phe Cys Pro Leu Arg Ser Phe Pro Asp Thr Val Tyr Lys Lys Leu Val
 115 120 125
 Gln Arg Glu Lys Thr Leu Lys Val Arg Gly Val Ala Arg Thr Pro Tyr
 130 135 140
 Leu Gly Asp Val Ala Val Val His
 145 150

<210> 2327
 <211> 599

<212> DNA

<213> Homo sapiens

<400> 2327

gaattccaga agatcaagta ttctacgat gccctggaga agaagcagtt tctccccgtg
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 120
 tcagagatcc gagcagctga gaagaaattt gggagcaaca aggccgagat ggtggtgcct
 180
 gactttctcg agcttttcaa ggagagagcc acagccccct tctttgtatt tcaggtgttc
 240
 tgtgtggggc tctggtgcct ggatgagtag tggtactaca gcgtctttac gctatccatg
 300
 ctggtggcgt tcgaggcctc gctggtgcag cagcagatgc ggaacatgtc ggagatccgg
 360
 aagatgggca acaagcccca catgatccag gtctaccgaa gccgcaagtg gaggccatt
 420
 gccagtgatg agatcgtacc aggggacatc gtctccatcg gtgaggccgg gttccgctca
 480
 gtcccagtgg gagccccagc ctcaggcct ctggccaacc ctctgcctc tgccctgcag
 540
 gccgctcccc acaggagaac ctggtgccat gtgacgtgct tctgctgca ggcgctgc
 599

<210> 2328

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2328

Glu	Phe	Gln	Lys	Ile	Lys	Tyr	Ser	Tyr	Asp	Ala	Leu	Glu	Lys	Lys	Gln
1			5						10					15	
Phe	Leu	Pro	Val	Ala	Phe	Pro	Val	Gly	Asn	Ala	Phe	Ser	Tyr	Tyr	Gln
			20					25					30		
Ser	Asn	Arg	Gly	Phe	Gln	Glu	Asp	Ser	Glu	Ile	Arg	Ala	Ala	Glu	Lys
		35					40				45				
Lys	Phe	Gly	Ser	Asn	Lys	Ala	Glu	Met	Val	Val	Pro	Asp	Phe	Ser	Glu
		50				55					60				
Leu	Phe	Lys	Glu	Arg	Ala	Thr	Ala	Pro	Phe	Phe	Val	Phe	Gln	Val	Phe
65					70					75					80
Cys	Val	Gly	Leu	Trp	Cys	Leu	Asp	Glu	Tyr	Trp	Tyr	Tyr	Ser	Val	Phe
			85					90					95		
Thr	Leu	Ser	Met	Leu	Val	Ala	Phe	Glu	Ala	Ser	Leu	Val	Gln	Gln	Gln
			100					105					110		
Met	Arg	Asn	Met	Ser	Glu	Ile	Arg	Lys	Met	Gly	Asn	Lys	Pro	His	Met
		115					120					125			
Ile	Gln	Val	Tyr	Arg	Ser	Arg	Lys	Trp	Arg	Pro	Ile	Ala	Ser	Asp	Glu
		130				135					140				
Ile	Val	Pro	Gly	Asp	Ile	Val	Ser	Ile	Gly	Glu	Ala	Gly	Phe	Arg	Ser
145					150					155					160
Val	Pro	Val	Gly	Ala	Pro	Ala	Ser	Gly	Pro	Leu	Ala	Asn	Pro	Pro	Ala
			165						170					175	
Ser	Ala	Leu	Gln	Ala	Ala	Pro	His	Arg	Arg	Thr	Trp	Cys	His	Val	Thr

180
Cys Phe Cys Cys Glu Ala Ala
195

185

190

<210> 2329
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2329
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tggtgtccaa agccacgcac tagctgatcg gggagaaccg tcacctcta ggctcgtgtc
120
atgagcacgc aaccactga ggaaccactc cgactagttg tggcattcaa tccagtgcct
180
agtgcctccc gggttgctca tcatcatgcg acgagatttc gcctggcggg gcaggccttc
240
attgtcgtcg tcattggtgg tttgttggtg gcgttgacgg ccgacgcctt ccagttatcg
300
acggatgatgt ggatgctcgg ggcattgggtg gtgctattcc tcgtgctttt cgtcatccag
360
aatctgcggc tgcacgccgc tcgcaaggat cc
392

<210> 2330
<211> 90
<212> PRT
<213> Homo sapiens

<400> 2330
Met Ser Thr Gln Pro Thr Glu Glu Pro Leu Arg Leu Val Val Ala Phe
1 5 10 15
Asn Pro Val Pro Ser Ala Ser Arg Val Ala His His His Ala Thr Arg
20 25 30
Phe Arg Leu Ala Val Gln Ala Phe Ile Val Val Val Ile Gly Gly Leu
35 40 45
Leu Trp Ala Leu Thr Ala Asp Ala Phe Gln Leu Ser Thr Val Met Trp
50 55 60
Met Leu Gly Ala Trp Val Val Leu Phe Leu Val Leu Phe Val Ile Gln
65 70 75 80
Asn Leu Arg Leu His Ala Ala Arg Lys Asp
85 90

<210> 2331
<211> 2813
<212> DNA
<213> Homo sapiens

<400> 2331
nnggagcaag agagttatta aaagtgggtg gaagacttcc tggatgcagga ggctcactcc
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gatttaaggt gcccgagtcc acgctgatgg actgccgtag acaactgaaa gacagtaagc
120

aaatTTtAtc tAttacaaag aactTTtaaag tTgagaatat tggacctcTt cctataactg
180
tttCgtctct gaaaattaat gggTataact gccaaaggTta tggattcgag gtgctggatt
240
gggattcagt ttcccttgga cccaaacaca tcccgcgata tcagcattgt gttcactcca
300
gactttacct cctcctgggt aattcgggac ctaagtcttg taaccgcagc ggacctagaa
360
tttCgttca ctctcaatgt gactctccct catcacctgt tgccttTtg tgcagacgtg
420
gttccaggac ccagctggga ggagtcattt tggaggetca cggTcttctt tgtcagtttTg
480
tccctgttggt gtgtgatttt aatagccttc caacaagcac agtacattct catggaattc
540
atgaaaacaa gacagaggca aaatgctagc tctctttcac agcaaaacaa tggTcctatg
600
gatgtaatca gccccattc ttacaaaagc aattgcaaga actttctcga tacatatggc
660
ccctctgata aaggcagggg gaagaactgc cttccagtga acactcccca aagcaggatc
720
cagaatgctg caaagaggag ccagccacc tatggTcatt ctcagaagaa gcacaaatgc
780
tcagtgtatt acagtaaaca caaaaccagc acagctgagg ccagcagcac cagcacgact
840
actgaggaaa aacagacttc acccctgggc agctcactgc ctgctgctaa agaggacatt
900
tgactgatg ccatgcgtga gaactggatc agcctcagat atgcaagtgg cataaatgtc
960
aacctgcaga agaatttaac ctttcccaaa aacttactga ataaagaaga aaacacactg
1020
aaaaacacaa ttgttttcag taatccttct tcagaatgta gtatgaagga gggaatacag
1080
acatgtatgt ttcttaagga aactgacatt aaaacttcag agaacacagc tgagttcaag
1140
gaacgggagc tctgtccact gaagacctcc aagaaactac ctgaaaacca tttaccaaga
1200
aactcacctc agtaccacca gccagacttg ccagaaattt ccaggaaaaa taatgggaat
1260
aaccagcaag tacctgtcaa gaatgaagta gatcattgtg aaaatttgaa gaaggTggac
1320
acaaagcctt cttcagaaaa gaagattcac aaaacatcta gagaagacat gttttctgag
1380
aaacaggaca tacctttcgt agagcaagaa gatccttata ggaagaaaaa gcttcaggag
1440
aaaagagaag gaaatttaca aaatttaaat tggagtaaaa gtcgaacatg tagaaagaac
1500
aagaaaagggt gtgttgcTcc agtctcaagg cctcctgaac agagtgatct aaagcttTgtg
1560
tgcaTgact ttgagaggTc tgagctgagc agtgacatca atgtaagaag ctggTgtata
1620
caggaaagca ctagggaggT ttgtaaagca gatgccgaaa ttgcaagcag tttacctgct
1680
gcccagagag aggcaggTta ctaccagaag cctgagaaga aatgtgtgga caagttctgc
1740

tccgattcca gctctgactg tgggagctcc tctggcagcg tgcgtgccag ccggggcagc
 1800
 tgggggagct ggagcagcac cagcagctcc gacggggata agaagcccat ggtggacgcc
 1860
 cagcacttcc tgccggccgg agacagtgtt tcacaaaatg attttccttc tgaagctccc
 1920
 atctccttga atctttctca taacatctgc aatcccatga ccgtgaatag tctcccacaa
 1980
 tacgcagagc ctctctgtcc cagccttcc gcccggccca cagggtgttga agaagataaa
 2040
 ggtctttact cacctggaga cctgtggccc actccgccag tgtgtgtgac aagcagctta
 2100
 aactgcaccc tggagaacgg cgtgccttgt gtgattcagg agtcggcccc ggttcataat
 2160
 agtttcattg attggagtgc aacatgcgaa ggccagtttt ccagcgcata ctgtccattg
 2220
 gaattgaacg attacaatgc ctttccagaa gaaaacatga actatgccaa tggcttcccc
 2280
 tgtcctgcag atgttcagac agactttatt gatcacaact ctcagtctac ctggaacacc
 2340
 ccaccaaca tgccctgtgc ctggggacat gccagtttca tcagctctcc gccctacctc
 2400
 acaagcacc gaagcttgtc tccaatgtct ggactttttg gttccatctg ggccccgcaa
 2460
 agcgatgtgt atgaaaattg ctgccccatc aacccacca cggaacattc gaccacatg
 2520
 gaaaaccaag cggtcgtgtg caaggaatac taccgggggt tcaaccggtt tcgcgctat
 2580
 atgaacctgg acatatggac taccacagcg aataggaatg caaatttccc actgtctaga
 2640
 gactcgagtt actgtgggaa tgtgtgaaaa taattggatt tttaaacaat gtgaataaag
 2700
 aggtctgtgt tttgattact agtgtaaact gggtattgag atagattatg acattgggtg
 2760
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 2813

<210> 2332

<211> 789

<212> PRT

<213> Homo sapiens

<400> 2332

Pro	Asp	Phe	Thr	Ser	Ser	Trp	Val	Ile	Arg	Asp	Leu	Ser	Leu	Val	Thr
1				5					10					15	
Ala	Ala	Asp	Leu	Glu	Phe	Arg	Phe	Thr	Leu	Asn	Val	Thr	Leu	Pro	His
			20					25					30		
His	Leu	Leu	Pro	Leu	Cys	Ala	Asp	Val	Val	Pro	Gly	Pro	Ser	Trp	Glu
		35					40				45				
Glu	Ser	Phe	Trp	Arg	Leu	Thr	Val	Phe	Phe	Val	Ser	Leu	Ser	Leu	Leu
	50					55				60					
Gly	Val	Ile	Leu	Ile	Ala	Phe	Gln	Gln	Ala	Gln	Tyr	Ile	Leu	Met	Glu
65				70						75				80	
Phe	Met	Lys	Thr	Arg	Gln	Arg	Gln	Asn	Ala	Ser	Ser	Ser	Ser	Gln	Gln

515 520 525
 Asp Ser Val Ser Gln Asn Asp Phe Pro Ser Glu Ala Pro Ile Ser Leu
 530 535 540
 Asn Leu Ser His Asn Ile Cys Asn Pro Met Thr Val Asn Ser Leu Pro
 545 550 555 560
 Gln Tyr Ala Glu Pro Ser Cys Pro Ser Leu Pro Ala Gly Pro Thr Gly
 565 570 575
 Val Glu Glu Asp Lys Gly Leu Tyr Ser Pro Gly Asp Leu Trp Pro Thr
 580 585 590
 Pro Pro Val Cys Val Thr Ser Ser Leu Asn Cys Thr Leu Glu Asn Gly
 595 600 605
 Val Pro Cys Val Ile Gln Glu Ser Ala Pro Val His Asn Ser Phe Ile
 610 615 620
 Asp Trp Ser Ala Thr Cys Glu Gly Gln Phe Ser Ser Ala Tyr Cys Pro
 625 630 635 640
 Leu Glu Leu Asn Asp Tyr Asn Ala Phe Pro Glu Glu Asn Met Asn Tyr
 645 650 655
 Ala Asn Gly Phe Pro Cys Pro Ala Asp Val Gln Thr Asp Phe Ile Asp
 660 665 670
 His Asn Ser Gln Ser Thr Trp Asn Thr Pro Pro Asn Met Pro Ala Ala
 675 680 685
 Trp Gly His Ala Ser Phe Ile Ser Ser Pro Pro Tyr Leu Thr Ser Thr
 690 695 700
 Arg Ser Leu Ser Pro Met Ser Gly Leu Phe Gly Ser Ile Trp Ala Pro
 705 710 715 720
 Gln Ser Asp Val Tyr Glu Asn Cys Cys Pro Ile Asn Pro Thr Thr Glu
 725 730 735
 His Ser Thr His Met Glu Asn Gln Ala Val Val Cys Lys Glu Tyr Tyr
 740 745 750
 Pro Gly Phe Asn Pro Phe Arg Ala Tyr Met Asn Leu Asp Ile Trp Thr
 755 760 765
 Thr Thr Ala Asn Arg Asn Ala Asn Phe Pro Leu Ser Arg Asp Ser Ser
 770 775 780
 Tyr Cys Gly Asn Val
 785

<210> 2333

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2333

cgtatgattg gtgtgggaca aatactattc aacaagagta cctaaatcat tgtttaaggc
 60
 gaagtaataa atatgaatgg ggtgtatcat ataatgaaca acgaatatcc atatagtcca
 120
 gacgaagttc ttcacaaagc aaaatcatat ttgtcagcag atgaatatga gtatgtttta
 180
 aaaagctatc atattgctta tgaagcacat aaaggtcagt tccgaaaaaa cggattacca
 240
 tacattatgc atcctataca agttgcagggt attttaacag aaatgcgatt agacggaccg
 300
 acgattgtcg cagggtttttt gcatgatgta attgaagata caccgtatac atttgaagat
 360

gtaaaagaaa tgttcaatga agaagttgct cgaattgttg atggtgtgac gaagcttaaa
 420
 aaaataaaat accgctcaaa agaagaacaa caagctgaaa atcatcgcaa gttatttatt
 480
 gcgattgccca aagatgtacg c
 501

<210> 2334
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2334
 Met Asn Gly Val Tyr His Ile Met Asn Asn Glu Tyr Pro Tyr Ser Ala
 1 5 10 15
 Asp Glu Val Leu His Lys Ala Lys Ser Tyr Leu Ser Ala Asp Glu Tyr
 20 25 30
 Glu Tyr Val Leu Lys Ser Tyr His Ile Ala Tyr Glu Ala His Lys Gly
 35 40 45
 Gln Phe Arg Lys Asn Gly Leu Pro Tyr Ile Met His Pro Ile Gln Val
 50 55 60
 Ala Gly Ile Leu Thr Glu Met Arg Leu Asp Gly Pro Thr Ile Val Ala
 65 70 75 80
 Gly Phe Leu His Asp Val Ile Glu Asp Thr Pro Tyr Thr Phe Glu Asp
 85 90 95
 Val Lys Glu Met Phe Asn Glu Glu Val Ala Arg Ile Val Asp Gly Val
 100 105 110
 Thr Lys Leu Lys Lys Ile Lys Tyr Arg Ser Lys Glu Glu Gln Gln Ala
 115 120 125
 Glu Asn His Arg Lys Leu Phe Ile Ala Ile Ala Lys Asp Val Arg
 130 135 140

<210> 2335
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2335
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 60
 tctctgcaga tggaccacac agcattcccc tgtggctgct gcagggaggg ctgtgagaac
 120
 cccatggggc gtgtggaatt taatcaggca agagttcaga cccatttcat ccacacactc
 180
 accgcctgc agttggaaca ggaggctgag agcttttaggg agctggaggg ccctgcccag
 240
 ggcagccac ccagccctgg tgaggaggcc ctggtcccta ctttccact ggccaagccc
 300
 cccatgaaca atgagctggg agacaacagc tgcagcagcg acatgactga ttcttccaca
 360
 gcatcttcat cagcatcggg cactagt
 387

<210> 2336

<211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2336
 Met Asp His Thr Ala Phe Pro Cys Gly Cys Cys Arg Glu Gly Cys Glu
 1 5 10 15
 Asn Pro Met Gly Arg Val Glu Phe Asn Gln Ala Arg Val Gln Thr His
 20 25 30
 Phe Ile His Thr Leu Thr Arg Leu Gln Leu Glu Gln Glu Ala Glu Ser
 35 40 45
 Phe Arg Glu Leu Glu Ala Pro Ala Gln Gly Ser Pro Pro Ser Pro Gly
 50 55 60
 Glu Glu Ala Leu Val Pro Thr Phe Pro Leu Ala Lys Pro Pro Met Asn
 65 70 75 80
 Asn Glu Leu Gly Asp Asn Ser Cys Ser Ser Asp Met Thr Asp Ser Ser
 85 90 95
 Thr Ala Ser Ser Ser Ala Ser Gly Thr Ser
 100 105

<210> 2337
 <211> 359
 <212> DNA
 <213> Homo sapiens

<400> 2337
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 60
 accatgtgca gctcaagaat gccctcggc ccatcgccct cggggcaggg gaagggcagc
 120
 ttctctgcac cagcttcct gctgggctcc agggcccaca ggctgaggcc gggggcccag
 180
 gggtaaatgc caggcaccct gctattgagg aacctatcca ggaggaagga ctcgggcaga
 240
 cctgcgggat cctcgctctc ccacgggtcc tcatggcaga agcagaagga gctggagtcg
 300
 ctgaggtccg tgggcaggcg ggctgggccc aacgtggggt caccgacctc ctcaaagct
 359

<210> 2338
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2338
 Met Cys Ser Ser Arg Met Ala Ser Gly Pro Ser Ala Ser Gly Gln Gly
 1 5 10 15
 Lys Gly Ser Phe Ser Ala Pro Ala Ser Leu Leu Gly Ser Arg Ala His
 20 25 30
 Arg Leu Arg Pro Gly Ala Gln Gly Ser Met Pro Gly Thr Leu Leu Leu
 35 40 45
 Arg Asn Leu Ser Arg Arg Lys Asp Ser Gly Arg Pro Ala Gly Ser Ser
 50 55 60
 Ser Ser His Gly Ser Ser Trp Gln Lys Gln Lys Glu Leu Glu Ser Leu

65 70 75 80
Arg Ser Val Gly Arg Arg Ala Gly Pro Asn Val Gly Ser Pro Thr Ser
 85 90 95
Ser Lys

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<210> 2339
<211> 439
<212> DNA
<213> Homo sapiens
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<400> 2339
acgcgtggcg tcagtcagg cagacttggg aggtcgcta caccgtcaac tcggttgcga
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ccctgtcttc caccctcgtc gtgcagtcg tcagtgtcct gtggtttggt ccctccgggc
120
actgggtccc gtagggcttg taatgctggg gcgctcggcg cgatgtgcc a gttccttggg
180
gagttactcc tctacactgg tgtgaacaag accggagaat tccccccat attctcgtt
240
cccgctcgtc ccgcacgtca ttgggactgg cttttacgcg gtagtggttg ccgtactctg
300
gttgctctgc ggcacggtcg gcagggggat catgtcatga gtccgacggt gagcgagcgg
360
cgtcttagcg cgccaatgcg acgtggcatc gtggcactgt gcgtggcgat ggcccttcgtg
420
ttgtcggggg gcggtgctg
439

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<210> 2340
<211> 92
<212> PRT
<213> Homo sapiens
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<400> 2340
Met Cys Gln Phe Leu Gly Glu Leu Leu Leu Tyr Thr Gly Val Asn Lys
  1                    5                10                15
Thr Gly Glu Phe Pro Pro Ile Phe Ser Phe Pro Ala Arg Pro Ala Arg
      20                25                30
His Trp Asp Trp Leu Leu Arg Gly Ser Gly Cys Arg Thr Leu Val Ala
      35                40                45
Leu Arg His Gly Arg Gln Gly Asp His Val Met Ser Pro Thr Val Ser
      50                55                60
Glu Arg Arg Leu Ser Ala Pro Met Arg Arg Gly Ile Val Ala Leu Cys
      65                70                75                80
Val Ala Met Ala Phe Val Leu Ser Gly Cys Gly Ala
      85                90

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<210> 2341
<211> 411
<212> DNA
<213> Homo sapiens
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<400> 2341

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 120
 ggagaaggaa gcagaggagg aggaggaaga ggaagagctg ctctgtgag cgggtcccca
 180
 ggagccaccg cacaggccca tgccccttca cctagcacca gcagcagcac cagcagccag
 240
 agtctctggg ccacccggca caggcaggag gattctggag accaggccac atcaggcnat
 300
 ggaagtggag agcagtgtga aaccacctt gtcagtgcc tcagtcaccc caagtacagt
 360
 ggccccgggg gttcagaact atagccagga gtctgggggc actgagtggc n
 411

<210> 2342

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2342

Ala	Ser	Leu	Ala	Tyr	Ala	Ser	Ala	Gly	Gly	Ala	Arg	Gly	Gly	His	Gly
1			5					10					15		
Gly	Gly	Gly	Gly	Lys	Gly	Arg	Arg	Gly	Glu	Gly	Glu	Gly	Ser	Arg	Gly
		20						25				30			
Gly	Gly	Gly	Arg	Gly	Arg	Ala	Ala	Pro	Val	Ser	Gly	Ser	Pro	Gly	Ala
		35				40					45				
Thr	Ala	Gln	Ala	His	Ala	Pro	Ser	Pro	Ser	Thr	Ser	Ser	Ser	Thr	Ser
	50					55				60					
Ser	Gln	Ser	Pro	Gly	Ala	Thr	Arg	His	Arg	Gln	Glu	Asp	Ser	Gly	Asp
65				70				75						80	
Gln	Ala	Thr	Ser	Gly	Xaa	Gly	Ser	Gly	Glu	Gln	Cys	Glu	Thr	His	Leu
			85					90						95	
Val	Ser	Ala	Leu	Ser	His	Pro	Lys	Tyr	Ser	Gly	Pro	Gly	Gly	Ser	Glu
			100					105						110	

Leu

<210> 2343

<211> 522

<212> DNA

<213> Homo sapiens

<400> 2343

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 ggaggccagg gaccctacca agccatgtcc caggacatgg gcaataccca agacatgttc
 120
 agccctgata agagctcaat gcccatgagc aacgtgggca ccacccggct cagccacatg
 180
 cctctgcccc ctgcgtccaa tctctctggg accgtgcatt cagccccaaa ccgggggcta
 240
 ggcaggcggc cttcggacct caccatcagt attaatacaga tgggctcacc gggcatgggg
 300

cacttgaagt cgcccaccct tagccagggtg cactcaccctc tggtcacctc gccctctgcc
 360
 aacctcaagt caccacagac tccctcacag atggtgccct tgccttctgc caaccgcga
 420
 ggacctctca agtcgccccca ggtcctcggc tccctccctca gtgtccggtc acccactggc
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<210> 2344

<211> 174

<212> PRT

<213> Homo sapiens

<400> 2344

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Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro	Tyr	Gln	Ala	Met	Ser	Gln	Asp
			20					25					30		
Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser	Pro	Asp	Gln	Ser	Ser	Met	Pro
		35					40					45			
Met	Ser	Asn	Val	Gly	Thr	Thr	Arg	Leu	Ser	His	Met	Pro	Leu	Pro	Pro
	50					55					60				
Ala	Ser	Asn	Pro	Pro	Gly	Thr	Val	His	Ser	Ala	Pro	Asn	Arg	Gly	Leu
65					70					75				80	
Gly	Arg	Arg	Pro	Ser	Asp	Leu	Thr	Ile	Ser	Ile	Asn	Gln	Met	Gly	Ser
				85					90					95	
Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro	Thr	Leu	Ser	Gln	Val	His	Ser
			100					105					110		
Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn	Leu	Lys	Ser	Pro	Gln	Thr	Pro
		115					120					125			
Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala	Asn	Pro	Pro	Gly	Pro	Leu	Lys
		130				135						140			
Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu	Ser	Val	Arg	Ser	Pro	Thr	Gly
145				150						155				160	
Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser	Met	Ala	Val	Pro	Ser		
				165					170						

<210> 2345

<211> 561

<212> DNA

<213> Homo sapiens

<400> 2345

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 120
 ctggcgctgc cgcccttttg ccgtttccgc cttttcttgc gcttctggtg cttgctggag
 180
 gcctgcgcgc ccgcctcgcc tgcgctgtcc gagtccttgg cgctgtcgga cgtgagtgac
 240
 tcgcagttct gcagccgcag gtccgactcg ctctccacca tagctattaa tgccaagaat
 300

gcaaatgaaa agaatatcat ctgggtgaat taccttctta gcaatcctga gtacaaggac
 360
 acacccatgg acatcgcaca gctcccccat ctgccggaga aaacttccga atcctcggag
 420
 acatccgact ctgagtcaga ctctaaagac acctcaggta ttacagagga caacgagaac
 480
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 540
 ggaagaagtc gggcaacgcg t
 561

<210> 2346

<211> 187

<212> PRT

<213> Homo sapiens

<400> 2346

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Ser	Ser	Arg	Gly	Gly	Leu	His	Gln	Pro	Ala	Ser	Arg	Pro	Pro	Gly	Leu
			20					25					30		
Asp	Ala	Leu	Asp	Arg	Arg	Arg	Arg	Leu	Ala	Leu	Pro	Pro	Phe	Cys	Arg
		35					40					45			
Phe	Arg	Leu	Phe	Leu	Arg	Phe	Trp	Cys	Leu	Leu	Glu	Ala	Cys	Ala	Pro
	50					55					60				
Ala	Ser	Pro	Ala	Leu	Ser	Glu	Ser	Leu	Ala	Leu	Ser	Asp	Val	Ser	Asp
65					70					75					80
Ser	Gln	Phe	Cys	Ser	Arg	Arg	Ser	Asp	Ser	Leu	Ser	Thr	Ile	Ala	Ile
				85				90						95	
Asn	Ala	Lys	Asn	Ala	Asn	Glu	Lys	Asn	Ile	Ile	Trp	Val	Asn	Tyr	Leu
			100					105					110		
Leu	Ser	Asn	Pro	Glu	Tyr	Lys	Asp	Thr	Pro	Met	Asp	Ile	Ala	Gln	Leu
		115					120					125			
Pro	His	Leu	Pro	Glu	Lys	Thr	Ser	Glu	Ser	Ser	Glu	Thr	Ser	Asp	Ser
	130					135					140				
Glu	Ser	Asp	Ser	Lys	Asp	Thr	Ser	Gly	Ile	Thr	Glu	Asp	Asn	Glu	Asn
145				150						155				160	
Ser	Lys	Xaa	Pro	Thr	Arg	Arg	Gly	Thr	Ser	Pro	Arg	Thr	Ala	Lys	Thr
				165				170						175	
Arg	Ser	Pro	Thr	Gly	Arg	Ser	Arg	Ala	Thr	Arg					
			180					185							

<210> 2347

<211> 375

<212> DNA

<213> Homo sapiens

<400> 2347

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 120
 gtcggtccga acatcgacgc ctgggtccgat ttccagccgc tgggcgtggt ggcgggggac
 180

acgccattca acttccccgc gatggtgccc ctgtggatgt atccgttggc gatcgtttgc
 240
 ggtaactgct ttatcctcaa gccgtccgag cgtgatccga gctcgacctt gctgatcgcc
 300
 cagctgttgc aggaagccgg tttgccccaa ggtgtgctga acgtggtgca tggtgacaag
 360
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 375

<210> 2348

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2348

Ile	Ser	Glu	Glu	His	Gly	Arg	Thr	Leu	Glu	Asp	Ala	Ala	Gly	Glu	Leu
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Lys	Arg	Gly	Ile	Glu	Asn	Val	Glu	Tyr	Ala	Cys	Ala	Ala	Pro	Glu	Val
			20				25						30		
Leu	Lys	Gly	Glu	Tyr	Ser	Arg	Asn	Val	Gly	Pro	Asn	Ile	Asp	Ala	Trp
		35				40					45				
Ser	Asp	Phe	Gln	Pro	Leu	Gly	Val	Val	Ala	Gly	Ile	Thr	Pro	Phe	Asn
	50				55					60					
Phe	Pro	Ala	Met	Val	Pro	Leu	Trp	Met	Tyr	Pro	Leu	Ala	Ile	Val	Cys
65				70					75					80	
Gly	Asn	Cys	Phe	Ile	Leu	Lys	Pro	Ser	Glu	Arg	Asp	Pro	Ser	Ser	Thr
			85					90					95		
Leu	Leu	Ile	Ala	Gln	Leu	Leu	Gln	Glu	Ala	Gly	Leu	Pro	Lys	Gly	Val
			100				105						110		
Leu	Asn	Val	Val	His	Gly	Asp	Lys	Thr	Ala	Val	Asp	Ala			
	115						120					125			

<210> 2349

<211> 417

<212> DNA

<213> Homo sapiens

<400> 2349

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 120
 gcacataatc atattaaatg gattggtaat acaaatgaac ttaatgcaag ttatgccgct
 180
 gacggatatg cacgtattaa tggcatcggt gcaatggtaa caacatttgg agtgggtgaa
 240
 ttaagtgctg tcaacggaat cgctggatct tatgctgagc gtgtaccagt tattgccatc
 300
 actggggcac ctactcgagc tgtagaacia gaaggcaaat acgttcacca ttcccttggc
 360
 gaaggaactt ttgatgatta tagaaaaatg tttgagccta ttacaacagc gcaagct
 417

<210> 2350

<211> 139
 <212> PRT
 <213> Homo sapiens

<400> 2350
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 Tyr Ser Ala Gly Ala Asp Lys Val Phe Gly Val Pro Gly Asp Phe Asn
 20 25 30
 Leu Ala Phe Leu Asp Asp Ile Ile Ala His Asn His Ile Lys Trp Ile
 35 40 45
 Gly Asn Thr Asn Glu Leu Asn Ala Ser Tyr Ala Ala Asp Gly Tyr Ala
 50 55 60
 Arg Ile Asn Gly Ile Gly Ala Met Val Thr Thr Phe Gly Val Gly Glu
 65 70 75 80
 Leu Ser Ala Val Asn Gly Ile Ala Gly Ser Tyr Ala Glu Arg Val Pro
 85 90 95
 Val Ile Ala Ile Thr Gly Ala Pro Thr Arg Ala Val Glu Gln Glu Gly
 100 105 110
 Lys Tyr Val His His Ser Leu Gly Glu Gly Thr Phe Asp Asp Tyr Arg
 115 120 125
 Lys Met Phe Glu Pro Ile Thr Thr Ala Gln Ala
 130 135

<210> 2351
 <211> 696
 <212> DNA
 <213> Homo sapiens

<400> 2351
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 120
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 180
 ggcacgcgc tgctccttga cgctaacgga cgccagacca ccttaacctc gtatcttggc
 240
 gccagctgg ctctttgcga ggcttaccgg aatgtggctg tctctggcgc aactccggtg
 300
 gctgtcactg attgcctcaa ttatggctcc cgtacgac ccatgtcat gtggcaattc
 360
 gacgagacca tccttgggtc ggttgacggc tgccgcgagc ttggcgtgcc gggtacgggc
 420
 ggtaacgttt cctgcacaa ccgcactgga gatgagtcga ttccggcctac tccgctcggt
 480
 ggtgtgctcg gogttattga tgacgtgcat cgtcgcatcc cgtcggcctt cgcacacgac
 540
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 600
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 696

<210> 2352
 <211> 232
 <212> PRT
 <213> Homo sapiens

<400> 2352
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 20 25 30
 Asp Gln Tyr Asp Arg Phe Val Arg Gly Asn Thr Val Leu Ala Gln Pro
 35 40 45
 Asn Asp Ala Gly Met Ile Arg Ile Asp Asp Asn Leu Gly Ile Ala Leu
 50 55 60
 Ser Leu Asp Ala Asn Gly Arg Gln Thr Thr Leu Asn Pro Tyr Leu Gly
 65 70 75 80
 Ala Gln Leu Ala Leu Cys Glu Ala Tyr Arg Asn Val Ala Val Ser Gly
 85 90 95
 Ala Thr Pro Val Ala Val Thr Asp Cys Leu Asn Tyr Gly Ser Pro Tyr
 100 105 110
 Asp Pro Asp Val Met Trp Gln Phe Asp Glu Thr Ile Leu Gly Leu Val
 115 120 125
 Asp Gly Cys Arg Glu Leu Gly Val Pro Val Thr Gly Gly Asn Val Ser
 130 135 140
 Leu His Asn Arg Thr Gly Asp Glu Ser Ile Arg Pro Thr Pro Leu Val
 145 150 155 160
 Gly Val Leu Gly Val Ile Asp Asp Val His Arg Arg Ile Pro Ser Ala
 165 170 175
 Phe Ala His Asp Gly Asp Ala Val Leu Leu Leu Gly Thr Thr Lys Cys
 180 185 190
 Glu Phe Gly Gly Ser Val Tyr Glu Asp Val Ile His Ala Gly His Leu
 195 200 205
 Gly Gly Met Pro Pro Met Pro Asp Leu Asn Ala Glu Lys Ala Leu Ala
 210 215 220
 Ala Val Met Val Glu Ala Ser Lys
 225 230

<210> 2353
 <211> 422
 <212> DNA
 <213> Homo sapiens

<400> 2353
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 120
 gaactcgggtt ctgttgatgt cttgggtcaac aatgctggga tcaactcaaga tacgcttatg
 180
 ctcaagatga ccgaagaaga ctttgaaaaa gtgattaaga tcaacttgac aggtgccttc
 240
 aacatgacgc aagcagtctt gaaacagatg atcaaggcac gtgaagggtgc gattatcaac
 300

atgtctagtg tggtcggttt gatgggaaat atcggacaag ccaactatgc agcttctaaa
 360
 gcaggcttga ttggttttac caagtcagtt gcacgtgaag ttgccaatcg caacgtacgc
 420
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 422

<210> 2354

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2354

Xaa	Ala	Ile	Ser	Glu	Glu	Leu	Leu	Ala	Glu	Phe	Ser	Asn	Tyr	Gly	Val
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Lys	Val	Val	Pro	Ile	Ser	Gly	Asp	Val	Ser	Asp	Phe	Ala	Asp	Ala	Lys
			20					25					30		
Arg	Met	Val	Asp	Gln	Ala	Ile	Thr	Glu	Leu	Gly	Ser	Val	Asp	Val	Leu
		35					40					45			
Val	Asn	Asn	Ala	Gly	Ile	Thr	Gln	Asp	Thr	Leu	Met	Leu	Lys	Met	Thr
	50				55					60					
Glu	Glu	Asp	Phe	Glu	Lys	Val	Ile	Lys	Ile	Asn	Leu	Thr	Gly	Ala	Phe
65				70					75					80	
Asn	Met	Thr	Gln	Ala	Val	Leu	Lys	Gln	Met	Ile	Lys	Ala	Arg	Glu	Gly
			85					90					95		
Ala	Ile	Ile	Asn	Met	Ser	Ser	Val	Val	Gly	Leu	Met	Gly	Asn	Ile	Gly
			100					105					110		
Gln	Ala	Asn	Tyr	Ala	Ala	Ser	Lys	Ala	Gly	Leu	Ile	Gly	Phe	Thr	Lys
		115					120					125			
Ser	Val	Ala	Arg	Glu	Val	Ala	Asn	Arg	Asn	Val	Arg				
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<210> 2355

<211> 5191

<212> DNA

<213> Homo sapiens

<400> 2355

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 120
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 180
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 480

ggccacagct acttcatcaa ctgggataag aagatgttct gcatgaagaa gcggacgcct
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4680
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tatattatat aaatatatat atacagttat atatatatat atattatttt ttggttctct
5040
ctcgtttttt agggagggaa gaaagtacca agttgcattg agctgtaatt aaggaacatt
5100
ataatttatg acacatttct atacttgcaa aaattatatc attttatgga tataagagaa
5160
aaatgccttt ttataaaatt tcaatttctg a
5191

<210> 2356

<211> 1000

<212> PRT

<213> Homo sapiens

<400> 2356

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Leu Ala Lys Phe Asp Gly Glu Val Ile Cys Glu Pro Pro Asn Asn Lys
 1          5          10          15
Leu Asp Lys Phe Ser Gly Thr Leu Tyr Trp Lys Glu Asn Lys Phe Pro
          20          25          30
Leu Ser Asn Gln Asn Met Leu Leu Arg Gly Cys Val Leu Arg Asn Thr
          35          40          45
Glu Trp Cys Phe Gly Leu Val Ile Phe Ala Gly Pro Asp Thr Lys Leu
 50          55          60
Met Gln Asn Ser Gly Arg Thr Lys Phe Lys Arg Thr Ser Ile Asp Arg
 65          70          75          80
Leu Met Asn Thr Leu Val Leu Trp Ile Phe Gly Phe Leu Val Cys Met
          85          90          95
Gly Val Ile Leu Ala Ile Gly Asn Ala Ile Trp Glu His Glu Val Gly
          100          105          110
Met Arg Phe Gln Val Tyr Leu Pro Trp Asp Glu Ala Val Asp Ser Ala
          115          120          125
Phe Phe Ser Gly Phe Leu Ser Phe Trp Ser Tyr Ile Ile Ile Leu Asn
          130          135          140
Thr Val Val Pro Ile Ser Leu Tyr Val Ser Val Glu Val Ile Arg Leu
          145          150          155          160
Gly His Ser Tyr Phe Ile Asn Trp Asp Lys Lys Met Phe Cys Met Lys
          165          170          175
Lys Arg Thr Pro Ala Glu Ala Arg Thr Thr Thr Leu Asn Glu Glu Leu
          180          185          190
Gly Gln Val Glu Tyr Ile Phe Ser Asp Lys Thr Gly Thr Leu Thr Gln
          195          200          205
Asn Ile Met Val Phe Asn Lys Cys Ser Ile Asn Gly His Ser Tyr Gly
          210          215          220
Asp Val Phe Asp Val Leu Gly His Lys Ala Glu Leu Gly Glu Arg Pro
          225          230          235          240
Glu Pro Val Asp Phe Ser Phe Asn Pro Leu Ala Asp Lys Lys Phe Leu
          245          250          255
Phe Trp Asp Pro Ser Leu Leu Glu Ala Val Lys Ile Gly Asp Pro His
          260          265          270
Thr His Glu Phe Phe Arg Leu Leu Ser Leu Cys His Thr Val Met Ser
          275          280          285
Glu Glu Lys Asn Glu Gly Glu Leu Tyr Tyr Lys Ala Gln Ser Pro Asp
          290          295          300
Glu Gly Ala Leu Val Thr Ala Ala Arg Asn Phe Gly Phe Val Phe Arg
          305          310          315          320
Ser Arg Thr Pro Lys Thr Ile Thr Val His Glu Met Gly Thr Ala Ile
          325          330          335
Thr Tyr Gln Leu Leu Ala Ile Leu Asp Phe Asn Asn Ile Arg Lys Arg
          340          345          350
Met Ser Val Ile Val Arg Asn Pro Glu Gly Lys Ile Arg Leu Tyr Cys
          355          360          365
Lys Gly Ala Asp Thr Ile Leu Leu Asp Arg Leu His His Ser Thr Gln
          370          375          380
Glu Leu Leu Asn Thr Thr Met Asp His Leu Asn Glu Tyr Ala Gly Glu
          385          390          395          400
Gly Leu Arg Thr Leu Val Leu Ala Tyr Lys Asp Leu Asp Glu Glu Tyr
          405          410          415
Tyr Glu Glu Trp Ala Glu Arg Arg Leu Gln Ala Ser Leu Ala Gln Asp

```

420 425 430
 Ser Arg Glu Asp Arg Leu Ala Ser Ile Tyr Glu Glu Val Glu Asn Asn
 435 440 445
 Met Met Leu Leu Gly Ala Thr Ala Ile Glu Asp Lys Leu Gln Gln Gly
 450 455 460
 Val Pro Glu Thr Ile Ala Leu Leu Thr Leu Ala Asn Ile Lys Ile Trp
 465 470 475 480
 Val Leu Thr Gly Asp Lys Gln Glu Thr Ala Val Asn Ile Gly Tyr Ser
 485 490 495
 Cys Lys Met Leu Thr Asp Asp Met Thr Glu Val Phe Ile Val Thr Gly
 500 505 510
 His Thr Val Leu Glu Val Arg Glu Glu Xaa Gln Glu Ser Pro Gly Glu
 515 520 525
 Asp Asp Gly Leu Ile Xaa Arg Ser Val Gly Asn Gly Phe Thr Tyr Gln
 530 535 540
 Asp Lys Leu Ser Ser Ser Lys Leu Thr Ser Val Leu Glu Ala Val Ala
 545 550 555 560
 Gly Glu Tyr Ala Leu Val Ile Asn Gly His Ser Leu Ala His Ala Leu
 565 570 575
 Glu Ala Asp Met Glu Leu Glu Phe Leu Glu Thr Ala Cys Ala Cys Lys
 580 585 590
 Ala Val Ile Cys Cys Arg Val Thr Pro Leu Gln Lys Ala Gln Val Val
 595 600 605
 Glu Leu Val Lys Lys Tyr Lys Lys Ala Val Thr Leu Ala Ile Gly Asp
 610 615 620
 Gly Ala Asn Asp Val Ser Met Ile Lys Thr Ala His Ile Gly Val Gly
 625 630 635 640
 Ile Ser Gly Gln Glu Gly Ile Gln Ala Val Leu Ala Ser Asp Tyr Ser
 645 650 655
 Phe Ser Gln Phe Lys Phe Leu Gln Arg Leu Leu Leu Val His Gly Arg
 660 665 670
 Trp Ser Tyr Leu Arg Met Cys Lys Phe Leu Cys Tyr Phe Phe Tyr Lys
 675 680 685
 Asn Phe Ala Phe Thr Met Val His Phe Trp Phe Gly Phe Phe Cys Gly
 690 695 700
 Phe Ser Ala Gln Thr Val Tyr Asp Gln Tyr Phe Ile Thr Leu Tyr Asn
 705 710 715 720
 Ile Val Tyr Thr Ser Leu Pro Val Leu Ala Met Gly Val Phe Asp Gln
 725 730 735
 Asp Val Pro Glu Gln Arg Ser Met Glu Tyr Pro Lys Leu Tyr Glu Pro
 740 745 750
 Gly Gln Leu Asn Leu Leu Phe Asn Lys Arg Glu Phe Phe Ile Cys Ile
 755 760 765
 Ala Gln Gly Ile Tyr Thr Ser Val Leu Met Phe Phe Ile Pro Tyr Gly
 770 775 780
 Val Phe Ala Asp Ala Thr Arg Asp Asp Gly Thr Gln Leu Ala Asp Tyr
 785 790 795 800
 Gln Ser Phe Ala Val Thr Val Ala Thr Ser Leu Val Ile Val Val Ser
 805 810 815
 Val Gln Ile Gly Leu Asp Thr Gly Tyr Trp Thr Ala Ile Asn His Phe
 820 825 830
 Phe Ile Trp Gly Ser Leu Ala Val Tyr Phe Ala Ile Leu Phe Ala Met
 835 840 845
 His Ser Asn Gly Leu Phe Asp Met Phe Pro Asn Gln Phe Arg Phe Val

850 855 860
 Gly Asn Ala Gln Asn Thr Leu Ala Gln Pro Thr Val Trp Leu Thr Ile
 865 870 875 880
 Val Leu Thr Thr Val Val Cys Ile Met Pro Val Val Ala Phe Arg Phe
 885 890 895
 Leu Arg Leu Asn Leu Lys Pro Asp Leu Ser Asp Thr Val Arg Tyr Thr
 900 905 910
 Gln Leu Val Arg Lys Lys Gln Lys Ala Gln His Arg Cys Met Arg Arg
 915 920 925
 Val Gly Arg Thr Gly Ser Arg Arg Ser Gly Tyr Ala Phe Ser His Gln
 930 935 940
 Glu Gly Phe Gly Glu Leu Ile Met Ser Gly Lys Asn Met Arg Leu Ser
 945 950 955 960
 Ser Leu Ala Leu Ser Ser Phe Thr Thr Arg Ser Ser Ser Ser Trp Ile
 965 970 975
 Glu Ser Leu Arg Arg Lys Lys Ser Asp Ser Ala Ser Ser Pro Ser Gly
 980 985 990
 Gly Ala Asp Lys Pro Leu Lys Gly
 995 1000

<210> 2357
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2357
 nacgcgttac gttgctggag gtcaatgcgt catgccgata catcatcaga tccgcactgt
 60
 ggcgaccatc cttgccacca ttaccattgc cgccctagtgc ctcacgggct gtaatacggc
 120
 ggtgcgcctaa acggtgaaga cgagggtttcc cgcaagctca tcaccgtgtg ggggtgctgag
 180
 ccacaaaacc cactcctgcc agccgacacc aatgaaaccg gcggcacgaa agtcatcacc
 240
 gccttggttcg ccggcctggt gtattacgac gccgacggca aaaccataa tgatgtggcc
 300
 aaatccattg acttcgatgg cgaccgcacc tacacggtga cgctgcggaa aaccagattc
 360
 gccgacggta ctgaggtgaa ggcccataat tttgtgaaag ctgccgca
 408

<210> 2358
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 2358
 Tyr Gly Gly Ala Pro Asn Gly Glu Asp Glu Val Ser Arg Lys Leu Ile
 1 5 10 15
 Thr Val Trp Gly Ala Glu Pro Gln Asn Pro Leu Leu Pro Ala Asp Thr
 20 25 30
 Asn Glu Thr Gly Gly Thr Lys Val Ile Thr Ala Leu Phe Ala Gly Leu
 35 40 45
 Val Tyr Tyr Asp Ala Asp Gly Lys Thr His Asn Asp Val Ala Lys Ser

50	55	60
Ile Asp Phe Asp Gly Asp Arg Thr Tyr Thr Val Thr Leu Arg Lys Thr		
65	70	75
Arg Phe Ala Asp Gly Thr Glu Val Lys Ala His Asn Phe Val Lys Ala		80
	85	90
		95
Ala Ala		

<210> 2359

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2359

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aacctgaaca tgttgggatt gagagagccc gaggtgtatg ggtcggaaac attggccgac
60
gttgagcaga cgtgtcgtga gtacggcgaa gaacttgggc ttgtaattga gtttcagcaa
120
accaatcacg aaggggcaaat gattgaatgg attcaccacg cccgtagaag gattgcgggg
180
attgtgatca atccaggagc atggacccat acatcggcag ccacccacga tgcgttgatt
240
gcagccgagg taccggtgat tgaggttcac atctcaaattg tccacaggcg tgaagatttc
300
aggcattttt cctacgtgtc acgc
324

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<210> 2360

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2360

Asn Leu Asn Met Leu Gly Leu Arg Glu Pro Glu Val Tyr Gly Ser Glu		
1	5	10
		15
Thr Leu Ala Asp Val Glu Gln Thr Cys Arg Glu Tyr Gly Glu Glu Leu		
	20	25
		30
Gly Leu Val Ile Glu Phe Gln Gln Thr Asn His Glu Gly Gln Met Ile		
	35	40
		45
Glu Trp Ile His His Ala Arg Arg Arg Ile Ala Gly Ile Val Ile Asn		
	50	55
		60
Pro Gly Ala Trp Thr His Thr Ser Ala Ala Ile His Asp Ala Leu Ile		
65	70	75
		80
Ala Ala Glu Val Pro Val Ile Glu Val His Ile Ser Asn Val His Arg		
	85	90
		95
Arg Glu Asp Phe Arg His Phe Ser Tyr Val Ser Arg		
	100	105

<210> 2361

<211> 398

<212> DNA

<213> Homo sapiens

<400> 2361

tccggatggg actccaacct acttgggggt actgggggtg cagaaagaac gcggccctgt
 60
 gtcagggacc ggtatggaag cctcagtagg gctggagccc catcatgccc cttccgagca
 120
 gatcaacaca gaccagctgg tcaaggggga cctccatccc tgccctgtcc tcacggagct
 180
 gtagggagag tcccaaaggc aggtggtggg gctggggcct ccaacagctg ggctctctca
 240
 tatcacttaa ggcccaacag cacacagtct cccaagtgtg ccagggtgcca caacacggcc
 300
 atcccgtctt cacagctcca ccccgctgc ctgcctgcca ccctctccac aaacatatgc
 360
 tgcagctcca caccgggaa acaccacatg ctgcgttt
 398

<210> 2362

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2362

Met	Pro	Leu	Pro	Ser	Arg	Ser	Thr	Gln	Thr	Ser	Trp	Ser	Arg	Gly	Thr
1				5				10					15		
Ser	Ile	Pro	Ala	Leu	Ser	Ser	Arg	Ser	Cys	Arg	Glu	Ser	Pro	Lys	Gly
			20					25					30		
Arg	Trp	Trp	Gly	Trp	Gly	Leu	Gln	Gln	Leu	Gly	Pro	Leu	Ile	Ser	Leu
			35				40					45			
Lys	Ala	Gln	Gln	His	Thr	Val	Ser	Gln	Val	Cys	Gln	Val	Pro	Gln	His
	50					55				60					
Gly	His	Pro	Ala	Leu	Thr	Ala	Pro	Pro	Arg	Leu	Pro	Ala	Cys	His	His
65					70				75					80	
Leu	His	Lys	His	Met	Leu	Gln	Leu	His	Thr	Arg	Glu	Thr	Pro	His	Ala
				85					90					95	

Arg Phe

<210> 2363

<211> 833

<212> DNA

<213> Homo sapiens

<400> 2363

nngactcttc tagctcccaa cgcaaaagcg tttaaagatg cagctcagaa gcattcaccag
 60
 cagcacaagg ggaggtccca agaaccagaa cttacatcac tgccctccag ttcagaggtt
 120
 tcctttccca ccttctcaga actttctgtt tccatggcct cctctgccac ctctgccacc
 180
 tcccctgatg tgctggcctc cgtttccatc gcttctcat ggcttcttc cgcccggtgt
 240
 tccaagccca ctgcangtcg aagcaaactg gattgcttta ccactcagaa ggtggcacag
 300
 ggactggcag cggtgccatc tgggagtctg tgtgctcagc ctccgagtgc aggtctcccc
 360

ggcccctgct gtggtgctag gtccccagat gagagatcac ggatcatgaag atcagcccc
 420
 aaggcagccc cttccnttcc agcctgggct ctggcggtgtt ctaggtgctc acttccatgg
 480
 ctggcctgct cacagagccc tacctcagcc tgtggtaagc gcacctgctc ggccctgggtg
 540
 ctctatgatg agccaccagt cagttctgca gatgtgtccc cgagctcctg ccgagggagc
 600
 aaacacgggtg gccctgctcc tagtgacctgt gcacgccacg ctccacacct gccatctgcc
 660
 cttccaccac ctgctccccc aggggctccg cctcgtgact cacgctcagg caagtctccg
 720
 ggcgcgaaca gctggctgat ggtgacatgc tgcagcctgg tcacatcaga aaccatgagg
 780
 gtggatctcc ggaggatcatc gatgtggaca gactgccaca gcccttcacg cgt
 833

<210> 2364
 <211> 135
 <212> PRT
 <213> Homo sapiens

<400> 2364
 Xaa Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln
 1 5 10 15
 Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr
 20 25 30
 Ser Leu Pro Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu
 35 40 45
 Ser Val Ser Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val
 50 55 60
 Leu Ala Ser Val Ser Ile Ala Ser Ser Trp Arg Ser Ser Ala Arg Cys
 65 70 75 80
 Ser Lys Pro Thr Ala Xaa Arg Ser Lys Arg Asp Cys Val Thr Thr Gln
 85 90 95
 Lys Val Ala Gln Gly Leu Ala Ala Val Pro Ser Gly Ser Leu Cys Ala
 100 105 110
 Gln Pro Pro Ser Ala Gly Phe Pro Gly Pro Cys Cys Gly Ala Arg Ser
 115 120 125
 Pro Asp Glu Arg Ser Arg Ser
 130 135

<210> 2365
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2365
 accggtgccc agtccccacg gctcgtccag acctacgttg agaaacttcg acgagacagt
 60
 ctccgtcagt tcgccaaca acctctgaac gaagtcaaga ttctccggca ctggagccaa
 120
 ggtgcttgcc ctggcatgaa cgccccaggg gaggtcgacg ccgtcgggat tctcacaccg
 180

atggtgatgg gactcggttt ccaaccacgg ttccatgtga cccagacagt tctggttggc
 240
 cccgagctcg atgcctcgtc cgcgacacag accatcgagc cacctcatgt cctccgccgt
 300
 caccgggctg cggtcggccc acacctcttc ctcaccggg taggcaaata ccgcttcacc
 360
 atagagctca aggtgattga gaccacaccg cgccatgacg cgcgtcagga aatcaagagt
 420
 ggaacgcgt
 429

<210> 2366

<211> 132

<212> PRT

<213> Homo sapiens

<400> 2366

Met	Ala	Arg	Cys	Gly	Leu	Asn	His	Leu	Glu	Leu	Tyr	Gly	Glu	Ala	Gly
1				5				10					15		
Phe	Ala	Tyr	Arg	Gly	Glu	Glu	Glu	Val	Trp	Ala	Asp	Arg	Ser	Pro	Val
			20					25					30		
Thr	Ala	Glu	Asp	Met	Arg	Trp	Leu	Asp	Gly	Leu	Cys	Arg	Gly	Arg	Gly
			35				40					45			
Ile	Glu	Leu	Gly	Ala	Asn	Gln	Asn	Cys	Leu	Gly	His	Met	Glu	Pro	Trp
	50				55					60					
Leu	Glu	Thr	Glu	Ser	His	His	His	Arg	Cys	Glu	Asn	Pro	Asp	Gly	Val
65					70				75					80	
Asp	Leu	Pro	Trp	Gly	Val	His	Ala	Arg	Ala	Ser	Thr	Leu	Ala	Pro	Val
				85				90						95	
Pro	Glu	Asn	Leu	Asp	Phe	Val	Gln	Arg	Leu	Leu	Gly	Glu	Leu	Thr	Glu
			100					105					110		
Thr	Val	Ser	Ser	Lys	Phe	Leu	Asn	Val	Gly	Leu	Asp	Glu	Pro	Trp	Glu
		115					120					125			
Leu	Gly	Thr	Gly												
	130														

<210> 2367

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2367

ngtgcacggg agaagacgtg cgcgcagttc ggcggaacct atccgggttc ggccggcagt
 60
 ggggggtcacg agctcaccga cgcgcgcgcg ttcgcctcgt ggggcgtcga tttcgtcaaa
 120
 tacgatcggg gctccgggtga ctccgcgcac gacgaccagg tcgcctcggt caccgcgatg
 180
 cgtgacgcaa tccgatccac cggacgcccc atggtgtaca gcatcaacct caacagcgaa
 240
 tcgccggatc ggtccggagc ccaattcgat tggggcggtg tggcaacct gacacgtacc
 300
 accaacgaca tctcgccggt gtggaccact cggccggcgc gtgccgatgc gacaccggca
 360

tcgggggtatc aggggatccg cgacatcatc gacgccgtgg ccccgatcgg cgcacggggt
 420
 gcgacggcag ctctgctcac atggacatgc tcgtcgtcgg tgtcggcaac gcgt
 474

<210> 2368
 <211> 158
 <212> PRT
 <213> Homo sapiens

<400> 2368
 Xaa Ala Arg Glu Lys Thr Cys Ala Gln Phe Gly Gly Thr Tyr Pro Gly
 1 5 10 15
 Ser Ala Gly Ser Gly Gly His Glu Leu Thr Asp Ala Arg Ala Phe Ala
 20 25 30
 Ser Trp Gly Val Asp Phe Val Lys Tyr Asp Arg Cys Ser Gly Asp Ser
 35 40 45
 Ala His Asp Asp Gln Val Ala Ser Phe Thr Ala Met Arg Asp Ala Ile
 50 55 60
 Arg Ser Thr Gly Arg Pro Met Val Tyr Ser Ile Asn Pro Asn Ser Glu
 65 70 75 80
 Ser Pro Asp Arg Ser Gly Ala Gln Phe Asp Trp Gly Gly Val Ala Thr
 85 90 95
 Met Thr Arg Thr Thr Asn Asp Ile Ser Pro Val Trp Thr Thr Arg Pro
 100 105 110
 Ala Gly Ala Asp Ala Thr Pro Ala Ser Gly Tyr Gln Gly Ile Arg Asp
 115 120 125
 Ile Ile Asp Ala Val Ala Pro Ile Gly Ala Arg Val Ala Thr Ala Ala
 130 135 140
 Ser Ser Thr Trp Thr Cys Ser Ser Ser Val Ser Ala Thr Arg
 145 150 155

<210> 2369
 <211> 408
 <212> DNA
 <213> Homo sapiens

<400> 2369
 ctgaatggca ggcaggcaga ggccaccaga gccagccccc cgagaagccc tgctgagcca
 60
 aaggggagcg ccctgggacc taaccacagag ccccatctca ccttcccccg ttctttcaaa
 120
 gtgcctcccc caaccccagt caggacttcg tccatcccag ttcaggaagc acaagaggct
 180
 cccgaaagga agagggggcc accaagaagg ctcccagccg actccactg cctcccagct
 240
 tccacatccg ccccgccctcc caggtctacc cagacagggc ccccgagcnc agactgccct
 300
 ggggagctca aggccacagc accagccagc ccaaggcttg gccagtccca gtcccaagca
 360
 gatgaacgag ctgggactcc gctccagcc cctcccctgc cccctcct
 408

<210> 2370

<211> 136
 <212> PRT
 <213> Homo sapiens

<400> 2370
 Leu Asn Gly Arg Gln Ala Glu Ala Thr Arg Ala Ser Pro Pro Arg Ser
 1 5 10 15
 Pro Ala Glu Pro Lys Gly Ser Ala Leu Gly Pro Asn Pro Glu Pro His
 20 25 30
 Leu Thr Phe Pro Arg Ser Phe Lys Val Pro Pro Pro Thr Pro Val Arg
 35 40 45
 Thr Ser Ser Ile Pro Val Gln Glu Ala Gln Glu Ala Pro Glu Arg Lys
 50 55 60
 Arg Gly Pro Pro Arg Arg Leu Pro Ala Asp Ser His Cys Leu Pro Ala
 65 70 75 80
 Ser Thr Ser Ala Pro Pro Pro Arg Ser Thr Gln Thr Gly Pro Pro Ser
 85 90 95
 Xaa Asp Cys Pro Gly Glu Leu Lys Ala Thr Ala Pro Ala Ser Pro Arg
 100 105 110
 Leu Gly Gln Ser Gln Ser Gln Ala Asp Glu Arg Ala Gly Thr Pro Pro
 115 120 125
 Pro Ala Pro Pro Leu Pro Pro Pro
 130 135

<210> 2371
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 2371
 gaattcgggtg tgcgatgcga gcctgcagcc tgggagcaga gacaaggagc aaaggcgggtg
 60
 agaggggttgc cagggcaccc agttacagct ggagctgcag gggacccatc cctcgagaga
 120
 ggcaggcact agtcatgagg caagagatgc ctcaagaagag gatgctggcc gcagggcaca
 180
 gcagagaggg agatagcccg gggcactcct caggaccggg cctcagggga cagcaaacaa
 240
 gattcctgat agacgcgccc aggtcatgcc ttttcagtgg tgtgagccag gttctggcgt
 300
 caggcggggcc aagggttttca tgcagcn
 327

<210> 2372
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 2372
 Met Arg Ala Cys Ser Leu Gly Ala Glu Thr Arg Ser Lys Gly Gly Glu
 1 5 10 15
 Arg Val Ala Arg Ala Pro Ser Tyr Ser Trp Ser Cys Arg Gly Pro Ile
 20 25 30
 Pro Arg Glu Arg Gln Ala Leu Val Met Arg Gln Glu Met Pro Gln Lys

```

      35              40              45
Arg Met Leu Ala Ala Gly His Ser Arg Glu Gly Asp Ser Pro Gly His
      50              55              60
Ser Ser Gly Pro Gly Leu Arg Gly Gln Gln Thr Arg Phe Leu Ile Asp
65              70              75              80
Ala Pro Arg Ser Cys Leu Phe Ser Gly Val Ser Gln Val Leu Ala Ser
      85              90              95
Gly Gly Pro Arg Phe Ser Cys Ser
      100

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<210> 2373

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2373

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gaattctgac attcaggaag tcaattgcag aaggtttaac caagttgatt ctgttttacc
60
aaatcctgtc tattctgaaa agcggccaat gccagactca tctcatgatg tgaaagttct
120
cacttcaaag acatcagctg ttgagatgac ccaggcagta ttgaatactc agctttcatc
180
agaaaatggt accaaagttg agcaaaattc accagcagtt tgtgaaacaa tttctgttcc
240
caagtccatg tccactgagg aatataaatc aaaaattcaa aatgaaaata tgctacttct
300
cgctttgctt tcacaggcac gtaagactca gaagacagta ttaaaagatg ctaatcaaac
360
tattcaggat tctaaaccag acagttgtga aatgaatcca aatacccaaa tgactggtaa
420
ccaactgaat ttgaagaaca tggaactcc aagtacttct aatgtaagtg gcagggtttt
480
ggacaactcc ttttgcagtg gacaagaatc ctcaacaaaa ggaatgcctg ctaaaagtga
540
cagtagctgt tccatggaag tgctagcaac ctgtctttcc ctgtggaaaa a
591

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<210> 2374

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2374

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Met Pro Asp Ser Ser His Asp Val Lys Val Leu Thr Ser Lys Thr Ser
1              5              10              15
Ala Val Glu Met Thr Gln Ala Val Leu Asn Thr Gln Leu Ser Ser Glu
      20              25              30
Asn Val Thr Lys Val Glu Gln Asn Ser Pro Ala Val Cys Glu Thr Ile
      35              40              45
Ser Val Pro Lys Ser Met Ser Thr Glu Glu Tyr Lys Ser Lys Ile Gln
      50              55              60
Asn Glu Asn Met Leu Leu Ala Leu Leu Ser Gln Ala Arg Lys Thr
65              70              75              80
Gln Lys Thr Val Leu Lys Asp Ala Asn Gln Thr Ile Gln Asp Ser Lys

```

<400> 2376															
Xaa	Ala	Met	Ser	Leu	Leu	Ser	Ser	Gly	Thr	Leu	Asp	Ser	Tyr	Leu	Glu
1				5					10					15	
Arg	His	Lys	Gln	Leu	Asp	Ala	Met	Arg	Met	Leu	His	Phe	Phe	Ala	Leu
			20					25					30		
Asp	Glu	Glu	Asn	Pro	Ala	Ser	Ile	Tyr	Asn	Cys	Leu	Arg	Ala	Ala	Arg
		35					40					45			
Gly	Asn	Ala	His	Ala	Val	Arg	Gly	Arg	Ile	Thr	Ala	Asp	Met	Trp	Glu
	50					55					60				
Asn	Leu	Asn	Ala	Thr	Trp	Leu	Glu	Met	Arg	Ser	Ile	Ala	Ala	Gly	Gly
65					70					75				80	
Leu	Ala	Arg	His	Gly	Ile	Ser	His	Phe	Cys	Asp	Trp	Val	Lys	Gln	Arg


```

      85              90              95
Ser His Leu Phe Arg Gly Ala Thr Ser Gly Thr Ile Met Arg Asn Asp
      100              105              110
Ala Tyr Arg Phe Ile Arg Leu Gly Thr Phe Val Glu Arg Ala Asp Asn
      115              120              125
Thr Leu Arg Leu Leu Asp Ala Arg Tyr Glu Met Phe Gly Glu Glu Ser
      130              135              140
Glu Glu Val Ser Asp Leu Ser Ala Arg Gly Tyr Tyr Gln Trp Ser Ala
      145              150              155              160
Leu Leu Arg Ala Leu Ser Ser Phe Glu Ala Tyr Thr Glu Leu Tyr Pro
      165              170              175
Asn Ala

```

<210> 2377

<211> 622

<212> DNA

<213> Homo sapiens

<400> 2377

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acgcgtgaag ggttgaggct tcagaagtgg tagggaagaa cagaagctcc cttctgaggg
60
agcaccagg agatgaaagg aaccaatcct ggggtggtcct gcaccaggct tatcaacccc
120
tgacagacaa atggaaaact tctgtgatgg tgggacatga aaaaatattt cacccttctg
180
ataaaatgga accagcagat agaagtagga atttttctgt taggtgaaat gtttttaaaa
240
atatgtatac aggaaaaagc ataaaacagt attgactggc aaacatagaa ctggaatgta
300
aatataatgt tctttgccct gaatgattta agtggcatga taaaactcat gccacagact
360
gggtaagaca aggaatctaa tccactctaa aaagaagaaa agcatagtaa aattctcctt
420
agagttagaa ttattaatag ttcctatcta ctatttaatt taatcatagt taatgatgag
480
aatttcttaa atttaaagct tctgatgatg ctaaatgtgc atttctcatg attccttaaa
540
acaatttttg taaattctat tcctaggacc ttctgctttc agaaaaatta atgtcttgta
600
ttcttcgtat tggaggagat ct
622

```

<210> 2378

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2378

```

Met Ser Phe Ile Met Pro Leu Lys Ser Phe Arg Ala Lys Asn Ile Ile
1              5              10              15
Phe Thr Phe Gln Phe Tyr Val Cys Gln Ser Ile Leu Phe Tyr Ala Phe
20              25              30
Ser Cys Ile His Ile Phe Lys Asn Ile Ser Pro Asn Arg Lys Ile Pro

```

```

          35              40              45
Thr Ser Ile Cys Trp Phe His Phe Ile Arg Arg Val Lys Tyr Phe Phe
      50              55              60
Met Ser His His His Arg Ser Phe Pro Phe Val Cys Gln Gly Leu Ile
65              70              75              80
Ser Leu Val Gln Asp His Pro Gly Leu Val Pro Phe Ile Ser Trp Val
          85              90              95
Leu Pro Gln Lys Gly Ala Ser Val Leu Pro Tyr His Phe
          100              105

```

<210> 2379

<211> 342

<212> DNA

<213> Homo sapiens

<400> 2379

```

tcatgacctg gagacttcgg aaactcaaca agactgcagg gcacccaggg gcaccagccc
60
cggtcaccgc agaggatcag tgcactttgc catctggcag atcaactcat ggcacaactg
120
ggaaacataa cattcacgct tgtgaaccga gacgccatac cccagcgggtg ccgagagcaa
180
cagtgtctgtg caggtctggg cagatgaggg cctccaggac acgaggactc actcgctcac
240
cctgccactt gggcagctgc tcgccactcc cctctctggag ggcaggacgg acaccacaca
300
cacacacaag caggggaagct gtgcagcagt ggggagaaaag ca
342

```

<210> 2380

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2380

```

Met Thr Trp Arg Leu Arg Lys Leu Asn Lys Thr Ala Gly His Pro Gly
 1              5              10              15
Ala Pro Ala Pro Val Thr Ala Glu Asp Gln Cys Thr Leu Pro Ser Gly
          20              25              30
Arg Ser Thr His Gly Thr Thr Gly Lys His Asn Ile His Ala Cys Glu
          35              40              45
Pro Arg Arg His Thr Pro Ala Val Pro Arg Ala Thr Val Leu Cys Arg
          50              55              60
Ser Gly Gln Met Arg Ala Ser Arg Thr Arg Gly Leu Thr Arg Ser Pro
65              70              75              80
Cys Pro Leu Gly Ser Cys Ser Pro Leu Pro Ser Trp Arg Ala Gly Arg
          85              90              95
Thr Pro His Thr His Thr Ser Arg Glu Ala Val Gln Gln Trp Gly Glu
          100              105              110
Ser

```

<210> 2381

<211> 434

<212> DNA

<213> Homo sapiens

<400> 2381

```

gtgcaccctg gccatatgga cgccagcgac gtcggcgctct tgcgtagcgt ggaaccgatc
60
ggcccaagta gagagatgga ttttgaatgg tgacgatgta cccgccgcag caagtggatg
120
ccgtcctctt tgacatggac ggaaccctgc tcaacaccct gccggcctgg tgcgtagcat
180
ctgagcatct gtggggcact tctctggctg acgctgacag cgccaagggt gaggggggca
240
ccgtcgacga cgtcgttgag ctgtatctgc gagaccaccc tcaggcagat cccagggcca
300
ccatcgagcg tttcatggac atccttgacg ccaacctggc tggccacacc gagccgatgc
360
ccggagctga ccgcctcgtg aagaggctgt caggatcatgt acccatcgct gtggtgtcga
420
attccccgac gcgt
434

```

<210> 2382

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2382

```

Met Val Thr Met Tyr Pro Pro Gln Gln Val Asp Ala Val Leu Phe Asp
1      5      10      15
Met Asp Gly Thr Leu Leu Asn Thr Leu Pro Ala Trp Cys Val Ala Ser
20      25      30
Glu His Leu Trp Gly Thr Ser Leu Ala Asp Ala Asp Ser Ala Lys Val
35      40      45
Asp Gly Gly Thr Val Asp Asp Val Val Glu Leu Tyr Leu Arg Asp His
50      55      60
Pro Gln Ala Asp Pro Gln Ala Thr Ile Glu Arg Phe Met Asp Ile Leu
65      70      75      80
Asp Ala Asn Leu Ala Gly His Thr Glu Pro Met Pro Gly Ala Asp Arg
85      90      95
Leu Val Lys Arg Leu Ser Gly His Val Pro Ile Ala Val Val Ser Asn
100     105     110
Ser Pro Thr Arg
115

```

<210> 2383

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2383

```

acgcgtgcgt tcagatgagc gccggacgaa actcctcgtt cgcttcggca ggcatggatt
60
catgtcggca cgggcctttg aacaggatcg ccgtcgcgtg gctatccgcc gcgggtgggg
120

```

cagaaaaacgc ccactctccc ttccccaggc gccggccgtc gagtcgtcta cgcaacgcac
 180
 gtctacatag gtgacttttt cataccccca ctttcgtact cggatgggct cggcgtgctc
 240
 gatgtcggca cgaaaaatta aatgcactga atgcgggttg tcgcacagga tgcattctgt
 300
 ctttcttgat gccaccacc ttgttacata ttctgccatg caaaacacct tgtgattttt
 360
 ggcggagtgc aacatggtat gtgtatgcc a ctg
 393

<210> 2384

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2384

Met	Leu	His	Ser	Ala	Lys	Asn	His	Lys	Val	Phe	Cys	Met	Ala	Glu	Tyr
1				5					10					15	
Val	Thr	Arg	Trp	Val	Ala	Ser	Arg	Lys	Thr	Arg	Cys	Ile	Leu	Cys	Asp
			20					25					30		
Asn	Pro	His	Ser	Val	His	Leu	Ile	Phe	Arg	Ala	Asp	Ile	Glu	His	Ala
			35				40				45				
Glu	Pro	Ile	Arg	Val	Arg	Lys	Trp	Gly	Tyr	Glu	Lys	Val	Thr	Tyr	Val
	50					55				60					
Asp	Val	Arg	Cys	Val	Asp	Asp	Ser	Thr	Ala	Gly	Ala	Trp	Gly	Arg	Glu
65					70				75					80	
Ser	Gly	Arg	Phe	Leu	Pro	His	Pro	Arg	Arg	Ile	Ala	Thr	Arg	Arg	Arg
			85					90					95		
Ser	Cys	Ser	Lys	Ala	Arg	Ala	Asp	Met	Asn	Pro	Cys	Leu	Pro	Lys	Arg
			100					105				110			
Pro	Arg	Ser	Phe	Val	Arg	Arg	Ser	Ser	Glu	Arg	Thr	Arg			
			115				120					125			

<210> 2385

<211> 347

<212> DNA

<213> Homo sapiens

<400> 2385

acgcgttccc aaagtaggat ggctgggata gagggaaagg acatctttca ggcttggttat
 60
 gcactgtgct gtggactctt gttgtggggt cctaggtctg cccagcattt tgggggtcac
 120
 cccgtgaccc tctacgggtt tccatgcccc cagcaccacg tccatcatca tttctgggggt
 180
 cccctcacct cagagagcct gcttcctatg actgcgtggg ccagctggag aaggacgacc
 240
 caagaccctt caagtttctg tgtcctgacc ccaagcatag gcctgagtgc tcctggggcc
 300
 caagggcctt tacgcactac tctctggggc ccactgtctg cactctt
 347

<210> 2386

<211> 109
 <212> PRT
 <213> Homo sapiens

<400> 2386
 Met Ala Gly Ile Glu Gly Lys Asp Ile Phe Gln Ala Cys Tyr Ala Leu
 1 5 10 15
 Cys Cys Gly Leu Leu Leu Trp Gly Pro Arg Ser Ala Gln His Phe Gly
 20 25 30
 Val His Pro Val Thr Leu Tyr Gly Phe Pro Cys Pro Gln His His Val
 35 40 45
 His His His Phe Trp Gly Pro Leu Thr Ser Glu Ser Leu Leu Pro Met
 50 55 60
 Thr Ala Trp Ala Ser Trp Arg Arg Thr Thr Gln Asp Pro Ser Ser Phe
 65 70 75 80
 Cys Val Leu Thr Pro Ser Ile Gly Leu Ser Ala Pro Gly Ala Gln Gly
 85 90 95
 Pro Leu Arg Thr Thr Leu Trp Gly Pro Leu Ser Ala Leu
 100 105

<210> 2387
 <211> 715
 <212> DNA
 <213> Homo sapiens

<400> 2387
 ncggccgcac ttacaccttac ggaggggaga taatgagatc aattagaggc gccgtcaccg
 60
 cgccggagac agctgccgcc gcatagtaat caccgcggg ctgggtgcgc gggggctccc
 120
 cgctacctgc ggcctgctg ctcccaccac gcggcaccga cccgggcgcg ccccgggccc
 180
 ctgtccgcag cccacagcca caccgcgcac cctacacct ccttgcgcct ctgctgggga
 240
 gctcaccccc tccactcgca cagtgcgctg cggcccgggg tgtgggaggt cccgggactt
 300
 ggggtgtgag tgctgtgtg ggggtagggg caggtgtccg cttgtgcgca tatgggcatg
 360
 agtgtacatg gcgtgtgcct ggagatgggc gagtgcaggc tggaatgtgc cggcgtggca
 420
 cgtgtgtggg cccaaataga tgcgtgtgtg atcacatgtt gtgttcgtgt ttgcacctcg
 480
 tgtgcctgtg tgtccgtatt tgagtgttta caggaatgtg ggtggtgagt acccgatatg
 540
 ggggtgcatct gcacttgtgc gtgtgtgtgt gtaggcgcgt gtgtgtgcgt gtgtgtgtta
 600
 ngggatacgt gtagatgtgc attagtgtga ctgtgtgtgc tcatgtgcct gtgcacgtgt
 660
 gtttgagggt tgtgtgcatg ggtagcgtct gtgagagcca tgtgtatatc tgcag
 715

<210> 2388
 <211> 58
 <212> PRT

<213> Homo sapiens

<400> 2388

```
Met Gly Met Ser Val His Gly Val Cys Leu Glu Met Gly Glu Cys Arg
 1           5           10           15
Leu Glu Cys Ala Gly Val Ala Arg Val Trp Ala Gln Ile Asp Ala Cys
      20           25           30
Val Ile Thr Cys Cys Val Arg Val Cys Thr Ser Cys Ala Cys Val Ser
      35           40           45
Val Phe Glu Cys Leu Gln Glu Cys Gly Trp
      50           55
```

<210> 2389

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2389

```
ntcacctgc cgccggaagg ttgctcgtac cgcattggcca tcgtcaccat gaagaagtcg
60
tatccggggcc acgccaagcg cgtcatgttg ggtgtctcgtt cgtttttgcg acagtccatg
120
tataccaagt tcgttatcgt caccgacgac gatattcaacg cccgcgactg gaacgacgtg
180
atctggggcca tcaccacgcg catggacccc aagcgcgcaca cggatgatgat cgataaacag
240
ccgatcgact acctcgactt cgcctcgcgc gtgtccggcc tgggttcgaa gatgggggctc
300
gatccacgac acaaatggcc cggccacacc acccgn
336
```

<210> 2390

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2390

```
Xaa Thr Leu Pro Pro Glu Gly Cys Ser Tyr Arg Met Ala Ile Val Thr
 1           5           10           15
Met Lys Lys Ser Tyr Pro Gly His Ala Lys Arg Val Met Leu Gly Val
      20           25           30
Trp Ser Phe Leu Arg Gln Phe Met Tyr Thr Lys Phe Val Ile Val Thr
      35           40           45
Asp Asp Asp Ile Asn Ala Arg Asp Trp Asn Asp Val Ile Trp Ala Ile
      50           55           60
Thr Thr Arg Met Asp Pro Lys Arg Asp Thr Val Met Ile Asp Asn Thr
      65           70           75           80
Pro Ile Asp Tyr Leu Asp Phe Ala Ser Pro Val Ser Gly Leu Gly Ser
      85           90           95
Lys Met Gly Leu Asp Pro Thr His Lys Trp Pro Gly His Thr Thr Arg
      100          105          110
```

<210> 2391

<211> 388

<212> DNA

<213> Homo sapiens

<400> 2391

gtcgactaac ctgcgtacag cgcgccacct acgttttagtc gcgaagcgtg tcgggtccat
60
gttcattccg gagctacacc atgaataaag tactacctga tccacccatc gatcccgcaa
120
aagaccgcgt cgctttcaac cgcgccatcg accattacct gcctaccacg ggcttccact
180
gcgtcaacga agacctgagt ttccaagacg ccctgctcta caccgccagc ctgctcgaca
240
gtgcctctgc cacggcgcgtg gattgcggtg agctgctgca aagccctgaa cgggcgaaga
300
tcctggccgt gtggcatttg ctggaaattg caaaaaccac cgtagatcgc ttccccatcg
360
agtgcctgac cgcaccaaag ccctgcct
388

<210> 2392

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2392

Met	Asn	Lys	Val	Leu	Pro	Asp	Pro	Pro	Ile	Asp	Pro	Ala	Lys	Asp	Arg
1				5					10					15	
Val	Ala	Phe	Asn	Arg	Ala	Ile	Asp	His	Tyr	Leu	Pro	Thr	Gln	Gly	Phe
			20					25					30		
His	Cys	Val	Asn	Glu	Asp	Leu	Ser	Phe	Glu	Asp	Ala	Leu	Leu	Tyr	Thr
			35				40					45			
Ala	Ser	Leu	Leu	Asp	Ser	Ala	Ser	Ala	Thr	Ala	Leu	Asp	Cys	Gly	Glu
	50				55					60					
Leu	Leu	Gln	Ser	Pro	Glu	Arg	Ala	Lys	Ile	Leu	Ala	Val	Trp	His	Leu
65				70					75					80	
Leu	Glu	Ile	Ala	Lys	Thr	Thr	Val	Asp	Arg	Phe	Pro	Ile	Glu	Cys	Leu
			85				90						95		
Thr	Ala	Pro	Lys	Pro	Cys										
			100												

<210> 2393

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2393

aacctgtcta ccgaggacca ggccgagcag gtagagattg tgaagcgctc tgagtccggc
60
atggtcaccg accccatcac tgcgcgcccc gatatgacca tcggggaagt agacgcgctg
120
tgcgcccgcgt tccgcatctc cggcctgccg gtggtagacg aggacggcac cctgatgggc
180
atttgacca cccgcgatat gcgcttcgag cctgactttg accgcaaggc cagcgaggtc
240

atgacggcta tgccgcttgt tgttgccgcgc gaggggtgtat ctaagaagga agccctcgaa
 300
 ctgctctcgg ccaataaggt ggaaaagctg cccatcgtcg atgcggtataa taagctcacc
 360
 ggcctgatta ccgtcaagga ctttgtcaag accgagcagt accccaacgc g
 411

<210> 2394

<211> 137

<212> PRT

<213> Homo sapiens

<400> 2394

Asn	Leu	Ser	Thr	Glu	Asp	Gln	Ala	Glu	Gln	Val	Glu	Ile	Val	Lys	Arg
1				5				10						15	
Ser	Glu	Ser	Gly	Met	Val	Thr	Asp	Pro	Ile	Thr	Ala	Arg	Pro	Asp	Met
			20					25					30		
Thr	Ile	Gly	Glu	Val	Asp	Ala	Leu	Cys	Ala	Arg	Phe	Arg	Ile	Ser	Gly
		35					40					45			
Leu	Pro	Val	Val	Asp	Glu	Asp	Gly	Thr	Leu	Met	Gly	Ile	Cys	Thr	Thr
	50					55					60				
Arg	Asp	Met	Arg	Phe	Glu	Pro	Asp	Phe	Asp	Arg	Lys	Val	Ser	Glu	Val
65					70					75					80
Met	Thr	Ala	Met	Pro	Leu	Val	Val	Ala	Arg	Glu	Gly	Val	Ser	Lys	Lys
				85					90					95	
Glu	Ala	Leu	Glu	Leu	Leu	Ser	Ala	Asn	Lys	Val	Glu	Lys	Leu	Pro	Ile
			100					105					110		
Val	Asp	Ala	Asp	Asn	Lys	Leu	Thr	Gly	Leu	Ile	Thr	Val	Lys	Asp	Phe
		115					120					125			
Val	Lys	Thr	Glu	Gln	Tyr	Pro	Asn	Ala							
		130					135								

<210> 2395

<211> 362

<212> DNA

<213> Homo sapiens

<400> 2395

aagctttcag aggagtttgc taaagtgtta aggatttgca tattttcaac ttagtcata
 60
 tctaagtgcc ccaataaaac agcgcggcgc attgggggct ggctttcatc aacaactaac
 120
 ttagcaatat taatctgacc ttttcttggt gattgggcat ttagtaataa tgcggggcca
 180
 atatcatcat actttccaaa tatttttgat ttttagaca tcaactgaag ttgtgaccat
 240
 ttactgtctt tgtcttgatg gcaatctaaa caaacatctc ttgtattaag ttgttcactt
 300
 acccaaggat taggcactct aaaggcatga tcgcgtcgat catcgactcc catgtaacgc
 360
 gt
 362

<210> 2396

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2396
 Met Gly Val Asp Asp Arg Arg Asp His Ala Phe Arg Val Pro Asn Pro
 1 5 10 15
 Trp Val Ser Glu Gln Leu Asn Thr Arg Asp Val Cys Leu Asp Cys His
 20 25 30
 Gln Asp Lys Asp Ser Lys Trp Ser Gln Leu Gln Leu Met Ser Lys Lys
 35 40 45
 Ser Lys Ile Phe Gly Lys Tyr Asp Asp Ile Gly Pro Ala Leu Leu Leu
 50 55 60
 Asn Ala Gln Ser Pro Gly Lys Gly Gln Ile Asn Ile Ala Lys Leu Val
 65 70 75 80
 Val Asp Glu Ser Gln Pro Pro Met Arg Arg Ala Val Leu Leu Gly His
 85 90 95
 Leu Asp Met Thr Lys Val Glu Asn Met Gln Ile Leu Asn Thr Leu Ala
 100 105 110
 Asn Ser Ser Glu Ser
 115

<210> 2397
 <211> 449
 <212> DNA
 <213> Homo sapiens

<400> 2397
 nacagcacac tccgctcctc ccgacgatca tagctttcac gtcggacatg atcccccgcc
 60
 tagtgtacta ctggctcctc tccgtccctc cctacgggga ccacacttcc tacaccatgg
 120
 aagggtacat caacaacact ctctccatct tcaaagtcgc agacttcaaa aacaaaagca
 180
 agggaaaccc gtactctgac ctgggtaacc ataccacatg caggatcgt gatttcgat
 240
 acccacctgg acacccccag gagtataaac acaacatcta ctattggcat gtgattgcag
 300
 ccaagctggc ttttatcatt gtcattggagc acgtcatcta ctctgtgaaa tttttcattt
 360
 catatgcaat tcccgatgta tcaaagcgca caaagagcaa gatccagaga gaaaaatacc
 420
 taacccaaaa gcttcttcat gagaatcac
 449

<210> 2398
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 2398
 Cys Thr Thr Gly Pro Ser Pro Ser Leu Pro Thr Gly Thr Thr Leu Pro
 1 5 10 15
 Thr Pro Trp Lys Gly Thr Ser Thr Thr Leu Ser Pro Ser Ser Lys Ser

```

                20                25                30
Gln Thr Ser Lys Thr Lys Ala Arg Glu Thr Arg Thr Leu Thr Trp Val
                35                40                45
Thr Ile Pro His Ala Gly Ile Val Ile Ser Asp Thr His Leu Asp Thr
                50                55                60
Pro Arg Ser Ile Asn Thr Thr Ser Thr Ile Gly Met
65                70                75

```

<210> 2399

<211> 344

<212> DNA

<213> Homo sapiens

<400> 2399

```

acgcgtcatg cttcacgaaa cgggtcacgc gcttcattac caagcagctg gcaaacacaa
60
cttgtatttc gagcgggttg cgccagtcga gatcatggag ttcgtggcct actgcttgca
120
gtttctgacg atcgagcgcc tggccatgtc aggggaactt tcgggtaaag aacaggaact
180
agtcaaacc tttgctggtc cgccaggct tggaggggtt cgaaaaccta caacgccaca
240
aaacgggttc agcactgggt ttataaacag cctaaaatcc cgacaagtaa agaactcgat
300
accgtatggc ttgagatgcg acacacgctc ggggtggatt ggtc
344

```

<210> 2400

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2400

```

Met Leu His Glu Thr Gly His Ala Leu His Tyr Gln Ala Ala Gly Lys
 1                5                10                15
His Asn Leu Tyr Phe Glu Arg Val Ala Pro Val Glu Ile Met Glu Phe
                20                25                30
Val Ala Tyr Cys Leu Gln Phe Leu Thr Ile Glu Arg Leu Ala Met Ser
                35                40                45
Gly Glu Leu Ser Gly Lys Glu Gln Glu Leu Val Lys Pro Phe Ala Gly
 50                55                60
Pro Ala Arg Leu Gly Gly Val Arg Lys Pro Thr Thr Pro Gln Asn Gly
65                70                75                80
Ser Ser Thr Gly Phe Ile Asn Ser Leu Lys Ser Arg Gln Val Lys Asn
                85                90                95
Ser Ile Pro Tyr Gly Leu Arg Cys Asp Thr Arg Ser Gly Trp Ile Gly
                100                105                110

```

<210> 2401

<211> 479

<212> DNA

<213> Homo sapiens

<400> 2401

nntaccgagg taaaactcga tagcctcggg gtcaccgacc agatgcgctc tgggcgctgc
 60
 tggatgtttg ccgcgctcaa cgtattccgc caccgcgcgg ccaaggagct caacatcgat
 120
 gactttgagt ttctctttac ctacctgcag tacttcgaca aactagagcg cgccaacttc
 180
 gcgctcaacc aactgctgga tctcaccgaa gacggcaccg actgggatga ccgcgacgtg
 240
 gctacttccc tcgagctcac aggcgacgac ggcggtcggg ggtcattttt caccaacctc
 300
 gtggacaagt acggcgcgagt cccggccgag gtcatgcctg aggtgcactc gtccggccac
 360
 accgaccaga tgaatcgca tatcgccacc atcatccgcc gcgccgcgca ccgtgcggtg
 420
 gaaggcgagg gggatcgcg gggcatcgtc aagcaagccc gccccgatat ccaacgcgt
 479

<210> 2402

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2402

Xaa	Thr	Glu	Val	Lys	Leu	Asp	Ser	Leu	Gly	Val	Thr	Asp	Gln	Met	Arg
1				5					10					15	
Ser	Gly	Arg	Cys	Trp	Met	Phe	Ala	Ala	Leu	Asn	Val	Phe	Arg	His	Arg
			20					25					30		
Ala	Ala	Lys	Glu	Leu	Asn	Ile	Asp	Asp	Phe	Glu	Phe	Ser	Phe	Thr	Tyr
		35					40					45			
Leu	Gln	Tyr	Phe	Asp	Lys	Leu	Glu	Arg	Ala	Asn	Phe	Ala	Leu	Asn	Gln
	50					55					60				
Leu	Leu	Asp	Leu	Thr	Glu	Asp	Gly	Thr	Asp	Trp	Asp	Asp	Arg	Asp	Val
65					70				75					80	
Ala	Thr	Ser	Leu	Glu	Leu	Thr	Gly	Asp	Asp	Gly	Gly	Trp	Trp	Ser	Phe
			85					90						95	
Phe	Thr	Asn	Leu	Val	Asp	Lys	Tyr	Gly	Ala	Val	Pro	Ala	Glu	Val	Met
		100						105					110		
Pro	Glu	Val	His	Ser	Ser	Gly	His	Thr	Asp	Gln	Met	Asn	Arg	Asp	Ile
		115				120						125			
Ala	Thr	Ile	Ile	Arg	Arg	Ala	Ala	His	Arg	Ala	Val	Glu	Gly	Glu	Gly
	130					135					140				
Asp	Arg	Gly	Gly	Ile	Val	Lys	Gln	Ala	Arg	Pro	Asp	Ile	Gln	Arg	
145					150					155					

<210> 2403

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2403

ntcataaacg gcgataaccc gctggactcg tctgcgggtc acccggaagc ctaccgcgtg
 60
 gtgcagcgta ttgccgccga gaccggccgt gatatccgtt cgctgatcgg tgacgcgcgcg
 120

ttcctcaagc gcctggaccc gaagaagtac accgacgaaa ccttcggtgt gccgaccatc
 180
 accgacatcc tgcaagagct ggaaaaacct ggccgcgacc cgcgtcccga gttcaagacc
 240
 gccgagttcc aggacggtgt tgaagacctc aaggacctgc agccgggcat gatcctcgaa
 300
 ggcggtgtca ccaacgtgac caactttggc gcctttgtgg atatcggcgt gcatcaggac
 360
 ggtttggtgc acatctctgc acttttcg
 387

<210> 2404

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2404

Xaa	Met	Asn	Gly	Asp	Asn	Pro	Leu	Asp	Ser	Ser	Ala	Val	His	Pro	Glu
1			5					10					15		
Ala	Tyr	Pro	Leu	Val	Gln	Arg	Ile	Ala	Ala	Glu	Thr	Gly	Arg	Asp	Ile
		20						25				30			
Arg	Ser	Leu	Ile	Gly	Asp	Ala	Ala	Phe	Leu	Lys	Arg	Leu	Asp	Pro	Lys
		35					40				45				
Lys	Tyr	Thr	Asp	Glu	Thr	Phe	Gly	Val	Pro	Thr	Ile	Thr	Asp	Ile	Leu
	50					55					60				
Gln	Glu	Leu	Glu	Lys	Pro	Gly	Arg	Asp	Pro	Arg	Pro	Glu	Phe	Lys	Thr
65				70				75						80	
Ala	Glu	Phe	Gln	Asp	Gly	Val	Glu	Asp	Leu	Lys	Asp	Leu	Gln	Pro	Gly
			85					90					95		
Met	Ile	Leu	Glu	Gly	Val	Val	Thr	Asn	Val	Thr	Asn	Phe	Gly	Ala	Phe
		100					105				110				
Val	Asp	Ile	Gly	Val	His	Gln	Asp	Gly	Leu	Val	His	Ile	Ser	Ala	Leu
		115				120					125				

Ser

<210> 2405

<211> 859

<212> DNA

<213> Homo sapiens

<400> 2405

ttgcaagtaa catcaaaagt catctacaga agcaaaagac aaaaaggccc ctccacctgc
 60
 aaattaaatg gaataatttg ctttatgaga agctcaccat tggggtcatt cttatttttt
 120
 ctcactocac atttcactac aaaccaagga aagctccctc atggaccgac atctggtgag
 180
 ctttcatctc tcccctggca atgcctggcc acctgacacc tggcctccct cctctttcca
 240
 gcaatcctgg taccaacgaa tggtcacca ccaccacccc caatgccag accgcagacc
 300
 tgcattcctc ccatctcaca gcccacaaac caaaccgtaa ttcattctac ctcccacctc
 360

actcctcacg aatttcttcc accgtagact ctggttaatt ggactgactg aagcccaggg
 420
 gtcagtttct gtccctaagag cgctccaggt ggctgcaccc tgtgcccaga gccaggcccc
 480
 ctgctatagg ctgcgtgcac tccccctgca ggtgctgggg acaccgcaac cctcctcctg
 540
 gggacaccta cttgcctttg caggccctcg ggggtcactt ctcccaggaa gccgcctctg
 600
 ggtgaggtaa tatccctcta tcacagcatt ggccacacca cattgcaaac gctgctgggg
 660
 tccactgtct tcaccaatta caccatgagc tccacagact ccaggaccat ggcttctacc
 720
 tctcagttcc cagtgtctagc tatggggccc agcacacagg gaacagcagt tcaattaccc
 780
 agttcactga agggcagacc tgggatcata caggagcaa ggaagcttga gccccttcag
 840
 gagaagggga agaacgcgt
 859

<210> 2406

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2406

Met	Asp	Arg	His	Leu	Val	Ser	Leu	His	Leu	Ser	Pro	Gly	Asn	Ala	Trp
1				5					10					15	
Pro	Pro	Asp	Thr	Trp	Pro	Pro	Ser	Ser	Phe	Gln	Gln	Ser	Trp	Tyr	Gln
			20				25						30		
Arg	Met	Ala	His	His	His	Pro	Pro	Gln	Cys	Pro	Asp	Arg	Arg	Pro	Ala
		35				40					45				
Phe	Leu	Pro	Ser	His	Ser	Pro	Lys	Ser	Lys	Pro	Leu	Phe	Ile	Leu	Pro
	50					55				60					
Pro	Ile	Leu	Leu	Leu	Thr	Asn	Phe	Phe	His	Arg	Arg	Leu	Trp	Leu	Ile
65					70					75				80	
Gly	Leu	Thr	Glu	Ala	Gln	Gly	Ser	Val	Ser	Val	Leu	Arg	Ala	Leu	Gln
			85						90					95	
Val	Ala	Ala	Pro	Cys	Ala	Gln	Ser	Gln	Ala	Pro	Cys	Tyr	Arg	Leu	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Gln	Val	Leu	Gly	Thr	Pro	Gln	Pro	Ser	Ser	Trp	Gly
		115					120					125			
His	Leu	Leu	Ala	Phe	Ala	Gly	Pro	Arg	Gly	Ser	Leu	Leu	Pro	Gly	Ser
	130					135					140				
Arg	Leu	Trp	Val	Arg											
145															

<210> 2407

<211> 303

<212> DNA

<213> Homo sapiens

<400> 2407

nacgcgtggg ttatcttcag catggtgate gcgattgggt tagccgttat ggctgogggtc
 60

gtattcatcg agcaaggcca gcgacgtatc cgggtgcagt acgccaagcg gatgggtgggg
 120
 cgccgaatgt ttgggtggctc gacgacgtac attccgctca aggtaaacca atctggcggt
 180
 atccccgtca tctttgcctc gtcgatcctg taccttccgg tgctctacgc aactttccgg
 240
 ccgcagacgt ccgcggcaaa gtggatcggg cactacttca cgcgcgggtga ccatccgggtg
 300
 tac
 303

<210> 2408
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 2408
 Xaa Ala Trp Phe Ile Phe Ser Met Val Ile Ala Ile Gly Leu Ala Val
 1 5 10 15
 Met Ala Ala Val Val Phe Ile Glu Gln Gly Gln Arg Arg Ile Pro Val
 20 25 30
 Gln Tyr Ala Lys Arg Met Val Gly Arg Arg Met Phe Gly Gly Ser Thr
 35 40 45
 Thr Tyr Ile Pro Leu Lys Val Asn Gln Ser Gly Val Ile Pro Val Ile
 50 55 60
 Phe Ala Ser Ser Ile Leu Tyr Leu Pro Val Leu Tyr Ala Thr Phe Arg
 65 70 75 80
 Pro Gln Thr Ser Ala Ala Lys Trp Ile Gly His Tyr Phe Thr Arg Gly
 85 90 95
 Asp His Pro Val Tyr
 100

<210> 2409
 <211> 322
 <212> DNA
 <213> Homo sapiens

<400> 2409
 ccatggtttc aagccccat tgtgtcagcc cagagagcaa ctggagaccc tctgacacca
 60
 cctccccgcc caacaggagg ggaagccgaa attcagattg tggaaactgc ctacaatttt
 120
 cttccggcca aatgaccctc cctaggctac caagaccctg gcctaagggg agccgaggtc
 180
 tcggccccgac tgcagacgcc cgcaccctga ctccagatgc ctccgaggca tccaggtggg
 240
 ccctgagggg cctgctgtgg ctttgttctt gttggctggg ctgggggtct gacctggtga
 300
 gggacatgag tgtcagtgtg gg
 322

<210> 2410
 <211> 106
 <212> PRT

<213> Homo sapiens

<400> 2410

```

Met Val Ser Ser Pro His Cys Val Ser Pro Glu Ser Asn Trp Arg Pro
 1           5           10           15
Ser Asp Thr Thr Ser Arg Pro Asn Arg Arg Gly Ser Arg Asn Ser Asp
          20           25           30
Cys Gly Asn Cys Leu Gln Phe Ser Ser Gly Gln Met Thr Leu Pro Arg
      35           40           45
Leu Pro Arg Pro Trp Pro Lys Gly Ser Arg Gly Leu Gly Pro Thr Ala
      50           55           60
Asp Ala Arg Thr Leu Thr Pro Asp Ala Ser Glu Ala Ser Arg Trp Ala
65           70           75           80
Leu Arg Gly Leu Leu Trp Leu Cys Ser Cys Trp Leu Gly Trp Gly Ser
          85           90           95
Asp Leu Val Arg Asp Met Ser Val Ser Val
      100           105

```

<210> 2411

<211> 371

<212> DNA

<213> Homo sapiens

<400> 2411

```

ccatgggctg ggtgctggag acacgagatc aggcaggccc tgccctggg gctcattcta
60
gggtctgcgg cagacagga gacagagga gctgtgagag ccctgaggct gagggtttt
120
ctggggaagc accatcccta gggacctcgc cggtcgggtca gtggccgctg ctgtcgggtg
180
gcagagcaga ggctggggcg agagtgggtca gcaggcctgc tgggtggcagc ttgtgcagga
240
agggaggatg gaggttggct tgtggctggc aagaggggtg catgcacgtc gctgaaaggg
300
aggcctgggc ccgaggcctg ggtgtgggga cgctgagga gactgtacag tgtggagtcg
360
ggggggctgc g
371

```

<210> 2412

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2412

```

Met Gly Trp Val Leu Glu Thr Arg Asp Gln Ala Gly Pro Ala Pro Gly
 1           5           10           15
Ala His Ser Arg Val Cys Gly Arg Gln Gly Asp Arg Gly Ser Cys Glu
          20           25           30
Ser Pro Glu Ala Glu Trp Leu Ser Gly Glu Ala Pro Ser Leu Gly Thr
      35           40           45
Ser Ala Phe Gly Gln Trp Pro Leu Leu Ser Val Cys Arg Ala Glu Ala
      50           55           60
Gly Ala Arg Val Val Ser Arg Pro Ala Gly Gly Ser Leu Cys Arg Lys

```

```

65              70              75              80
Gly Gly Trp Arg Leu Ala Cys Gly Trp Gln Glu Gly Gly Met His Val
              85              90              95
Ala Glu Arg Gln Ala Trp Ala Arg Gly Leu Gly Val Gly Thr Pro Glu
              100              105              110
Glu Thr Val Gln Cys Gly Val Gly Gly Ala Ala
              115              120

```

<210> 2413
 <211> 784
 <212> DNA
 <213> Homo sapiens

```

<400> 2413
ccccggagag ttgggcgggg caggggtggt catggcatac tcgggattgt gtcatttggt
60
gtggctggat ttaggggtgca tataaaggca gtgaggctgg agaagtattc taggtctgct
120
taggctcact gaggaattgg ggttcttctt gaagagcatg gagcccttgg aggacctcca
180
cagcaggcag agagacggca gcctcctggg atctgattgc ccagccccac ttacacagggt
240
ggctgagggtg agctcttccc atggagtgca tccttctctga tcagcctgag gagagcaggg
300
ccccaccatc ctgcacctgg tgcagaaaaa ccctgtgaag ctgcactaca gaaagacacc
360
accaggtggc aggcctggag attgcatgga ggccccgccc cccccaacca attctttgat
420
aatagcacag tgttgaagag agggggccat aaaagactga atccctgttc atgccaggct
480
ggctctgccc aacatatatg agactgcaag ttctgccact gtgggctgtg taccacaag
540
ccacaggtcc ctctgaacct gtgaatcagg tcttgggagc tattcgagca ggctggattt
600
tctcctctgc ctggggggac ctgagagtaa gttacagact tcatgacct tcaccccaaa
660
acattgagt atgtatcacc taagaacaag ggcattctcc tgtagaacca caatgcaatt
720
tgcaagttca ggaaatttaa ctgatacaat actattatct aattacggag agaagacaac
780
gcgt
784

```

<210> 2414
 <211> 137
 <212> PRT
 <213> Homo sapiens

```

<400> 2414
Met Lys Ser Val Thr Tyr Ser Gln Val Pro Arg Gly Arg Gly Glu Asn
1              5              10              15
Pro Ala Cys Ser Asn Ser Ser Gln Asp Leu Ile His Arg Phe Arg Gly
              20              25              30
Thr Cys Gly Leu Trp Val His Ser Pro Gln Trp Gln Asn Leu Gln Ser

```



```
<210> 2415
<211> 2164
<212> DNA
<213> Homo sapiens
```

1747

ctctgtgat ctctgtgttt tcccttttct ttctggggcc aggaagtcag ggtcaactcc
 1080
 caggcctcag gtgaaggggc ccagaacacc tgctctcacc tgagccccag gtgaaggggc
 1140
 ccgggaacac ctgctctcac ctgagcccca ggtgaagggg cccgggaaca cctgctctca
 1200
 cctgagcccc tgggtgaaggg gcccggaaca cctgctctca cctgagcccc aggtgaaggg
 1260
 gcccggaaca cctgctctca cctgagcccc aggtgaaggg gcccggaaca cttgctctca
 1320
 cctgagcccc aggtgaaggg gcccggaac acctctcacc tgaacccggg ggtcccatcc
 1380
 caggaagaag ggccatctca ggacatgagt cctcaggggc cctgcacatt caatctgaag
 1440
 gtgaccctgg cctggctgaa gctggaagag ctgtggggac tcagcctgta aacagagcgt
 1500
 aaggttcaca tgctgggtgc ttaatccgtt tctggaggaa gagtatgaca cccacttggtg
 1560
 atggggtcct tgtgcggtgg ggaccggggc cggcgggctc caggccagca cacctaacct
 1620
 atggatgtgg aacctacggc cgagaaggaa tgttgcatga gtcggatccc agtccattgt
 1680
 cagtgagggg tgaggggtgac cccatctgct atttttgtgc tcatcctcat acaaccattt
 1740
 ggggatgtgc ctattagggc tccgtaagaa ctcatatgcc tgggaagccc agcccctcag
 1800
 gtgccccac acacagcctt cccttgacgc ctacatttct aggcacatgt gaggcatctt
 1860
 tcttgagacc ccgagccagc cctgtccctc cccagtgcag catggcactc aggagataca
 1920
 ggctggacat ggggcagtcg ttctggggag gcctggccta gcagccacct acctgagccc
 1980
 tcccgccag gcttcgtgct ggggtggggc atgtgccagg acaggagggg cccggcggaa
 2040
 agccagcccc ggactcatcg tgacattgag atccactgg agggtagggg tggttaataaa
 2100
 cttctccaaa cgataaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 2160
 aaaa
 2164

<210> 2416

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2416

Met	Glu	Val	Leu	Arg	Arg	Ser	Ser	Val	Phe	Ala	Ala	Glu	Ile	Met	Asp
1				5				10					15		
Ala	Phe	Asp	Arg	Trp	Pro	Thr	Asp	Lys	Glu	Leu	Val	Ala	Gln	Ala	Lys
		20					25				30				
Ala	Leu	Gly	Arg	Glu	Tyr	Val	His	Ala	Arg	Leu	Leu	Arg	Ala	Gly	Leu
		35				40				45					
Ser	Trp	Ser	Ala	Pro	Glu	Arg	Ala	Ser	Pro	Ala	Pro	Gly	Gly	Arg	Leu

50	55	60
Ala Glu Val Cys	Ala Val Leu Leu Arg	Leu Gly Asp Glu Leu Glu Met
65	70	75
Ile Arg Pro Ser	Val Tyr Arg Asn Val	Ala Arg Gln Leu His Ile Ser
85	90	95
Leu Gln Ser Glu	Pro Val Val Thr Asp	Ala Phe Leu Ala Val Ala Gly
100	105	110
His Ile Phe Ser	Ala Gly Ile Thr Trp	Gly Lys Val Val Ser Leu Tyr
115	120	125
Ala Val Ala Ala	Gly Leu Ala Val Asp	Cys Val Arg Gln Ala Gln Pro
130	135	140
Ala Met Val His	Ala Leu Val Asp Cys	Leu Gly Glu Phe Val Arg Lys
145	150	155
Thr Leu Ala Thr	Trp Leu Arg Arg Arg	Gly Gly Trp Thr Asp Val Leu
165	170	175
Lys Cys Val Val	Ser Thr Asp Pro Gly	Leu Arg Ser His Trp Leu Val
180	185	190
Ala Ala Leu Cys	Ser Phe Gly Arg Phe	Leu Lys Ala Ala Phe Phe Val
195	200	205
Leu Leu Pro Glu	Arg	
210		

<210> 2417

<211> 615

<212> DNA

<213> Homo sapiens

<400> 2417

```

nnagatcttt ggaatgggca gaactactaa atacagttaa tgcaccaaca agggtaagta
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aagctgattt gattttcata ttgatacctc aatagttaag tgaaggacta gttattgctc
120
cagttgttag ttttcacact ttaaaaaagg ctttcaatta taaaatcttt ctccattatt
180
acgttttttc acaactgtga tccacgccac agttgcaa atcaacata gaaaaattaa
240
ataacataat tgatgaaaag ttagtttttc acaaaaatac gaaaaatttc atcacctaga
300
gaggaaaatg ttatgacaac ctatttcgat aaaattgaaa aaatctcctt tgaggggagaa
360
aaatccacaa atccttttgc tttcaaacat tatgatgcta atcaagtaat tttaggtaaa
420
actatggctg aacatttacg cttaacggtg tgttattggc ataccttttg ctggaatggg
480
aatgatatgt ttgggctagg ttctttggaa cgaagttggc agaaaaattc aaatttgctt
540
gctggcgag aacaaaaagc cgatattgct tttgagtttt tgaataagtt aggcgtgcct
600
tattattggt ttcac
615

```

<210> 2418

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2418

```

Met Thr Thr Tyr Phe Asp Lys Ile Glu Lys Ile Ser Phe Glu Gly Glu
 1           5           10           15
Lys Ser Thr Asn Pro Phe Ala Phe Lys His Tyr Asp Ala Asn Gln Val
          20           25           30
Ile Leu Gly Lys Thr Met Ala Glu His Leu Arg Leu Thr Val Cys Tyr
          35           40           45
Trp His Thr Phe Cys Trp Asn Gly Asn Asp Met Phe Gly Leu Gly Ser
          50           55           60
Leu Glu Arg Ser Trp Gln Lys Asn Ser Asn Leu Leu Ala Gly Ala Glu
65           70           75           80
Gln Lys Ala Asp Ile Ala Phe Glu Phe Leu Asn Lys Leu Gly Val Pro
          85           90           95
Tyr Tyr Cys Phe His
          100

```

<210> 2419

<211> 318

<212> DNA

<213> Homo sapiens

<400> 2419

```

aaattttcag aagtcctggt gttgcgcggt caaacaggga ccgaggaggg acgaccgcct
60
ccccgtgacg ctgcttcttc ttctgcctg cagctgaggg gtctgttttg tgcgcttcc
120
gctccttctt cacgtacaca gggggcagct tagcctctgg gatgggagtg gcttcataca
180
tgagacacat gcccgagtcg aggtagatgt cgctgtcgtc ctgcggcggg gtgggtgggg
240
tccagaacgg catgacttct gtctgcccac cgacatcttc gtagacatac tccatgttgt
300
aggcatcccc tcacgcgt
318

```

<210> 2420

<211> 98

<212> PRT

<213> Homo sapiens

<400> 2420

```

Met Glu Tyr Val Tyr Glu Asp Val Asp Gly Gln Thr Glu Val Met Pro
 1           5           10           15
Phe Trp Thr Pro Pro Thr Pro Pro Gln Asp Asp Ser Asp Ile Tyr Leu
          20           25           30
Asp Ser Gly Met Cys Leu Met Tyr Glu Ala Thr Pro Ile Pro Glu Ala
          35           40           45
Lys Leu Pro Pro Val Tyr Val Arg Lys Glu Arg Lys Arg His Lys Thr
          50           55           60
Asp Pro Ser Ala Ala Gly Arg Lys Lys Lys Gln Arg His Gly Glu Ala
65           70           75           80
Val Val Pro Pro Arg Ser Leu Phe Asp Arg Ala Thr Pro Gly Leu Leu

```

1751

gaatgcgcag actgcaagtc aaagggctcct cgatgggcaa gtgtgaatct aggtatcttt
 180
 atatgcatga catgtttctgg cattcataga agcctggggg tgcacatata taaggtaaga
 240
 tctgccaccc tggatacatg gctgccagag caagttgcat ttattcaata aatgggaaac
 300
 gaaaaagcaa atagctattg ggaagcagag ctgcctccta actacgatag ggttgaata
 360
 gagaatttga t
 371

<210> 2424

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2424

Met	Asn	Glu	Lys	Ala	Ser	Val	Ser	Lys	Glu	Leu	Asn	Ala	Lys	His	Lys
1			5					10					15		
Lys	Ile	Leu	Glu	Gly	Leu	Leu	Arg	His	Pro	Glu	Asn	Arg	Glu	Cys	Ala
			20				25					30			
Asp	Cys	Lys	Ser	Lys	Gly	Pro	Arg	Trp	Ala	Ser	Val	Asn	Leu	Gly	Ile
		35				40					45				
Phe	Ile	Cys	Met	Thr	Cys	Ser	Gly	Ile	His	Arg	Ser	Leu	Gly	Val	His
	50				55					60					
Ile	Ser	Lys	Val	Arg	Ser	Ala	Thr	Leu	Asp	Thr	Trp	Leu	Pro	Glu	Gln
65				70				75					80		
Val	Ala	Phe	Ile	Gln	Ser	Met	Gly	Asn	Glu	Lys	Ala	Asn	Ser	Tyr	Trp
			85				90					95			
Glu	Ala	Glu	Leu	Pro	Pro	Asn	Tyr	Asp	Arg	Val	Gly	Ile	Glu	Asn	Leu
			100				105					110			

<210> 2425

<211> 411

<212> DNA

<213> Homo sapiens

<400> 2425

accggtttgc aggcctggaa agacgggcat ttcgacctgg tgatcgtcga ctgcaacatg
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 cccgtcctga acggctacga gatgaccgcg cgctgcgcg aacatgaagc cncgccatg
 120
 acctcccggc ctgcacgggg gttcggtttc accgcccacg cccagcccga ggaacgcccc
 180
 cgctgcaagg aagccggcat gaacgactgc ctgttcaagc ccatcagcct gaccaccctc
 240
 aaccagaaac tcgccgactg cagccgcgc cgcgtccga gccaggccgc cttcagcctc
 300
 gacggcctgc acgccctgac cgggggcgag ccgctgctga tgcgtcgctt gatcgacgag
 360
 ctgctgagca gttgccaggc ggcccgcgag gcaactgctc gactgcccac c
 411

<210> 2426

<211> 137
 <212> PRT
 <213> Homo sapiens

<400> 2426
 Thr Gly Leu Gln Ala Trp Lys Asp Gly His Phe Asp Leu Val Ile Val
 1 5 10 15
 Asp Cys Asn Met Pro Val Leu Asn Gly Tyr Glu Met Thr Arg Arg Leu
 20 25 30
 Arg Glu His Glu Ala Xaa Ala Met Thr Ser Arg Pro Ala Arg Gly Phe
 35 40 45
 Gly Phe Thr Ala His Ala Gln Pro Glu Glu Arg Pro Arg Cys Lys Glu
 50 55 60
 Ala Gly Met Asn Asp Cys Leu Phe Lys Pro Ile Ser Leu Thr Thr Leu
 65 70 75 80
 Asn Gln Lys Leu Ala Asp Val Thr Pro Arg Pro Arg Pro Ser Gln Ala
 85 90 95
 Ala Phe Ser Leu Asp Gly Leu His Ala Leu Thr Gly Gly Glu Pro Leu
 100 105 110
 Leu Met Arg Arg Leu Ile Asp Glu Leu Leu Ser Ser Cys Gln Ala Ala
 115 120 125
 Arg Glu Ala Leu Leu Gly Leu Pro Ile
 130 135

<210> 2427
 <211> 293
 <212> DNA
 <213> Homo sapiens

<400> 2427
 cataacaaag gcttagggat tttggtgccc tgtgcaattn tggcagcttt tctgttgatt
 60
 tggagcgtaa aatgttgcag agcccagcta gaagccagga ggagcagaca ccctgctgat
 120
 ggagcccaac aagaaagatg ttgtgtccct cctggtgagc gctgtcccag tgcacccgat
 180
 aatggcgaag aaaatgtgcc tctttcagga aaagtatagg aaatgagaga agactgtgac
 240
 aactcatgac ctgcatecct aatatccagt gacttcatct ccccttcacg cgt
 293

<210> 2428
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2428
 His Asn Lys Gly Leu Gly Ile Leu Val Pro Cys Ala Ile Xaa Ala Ala
 1 5 10 15
 Phe Leu Leu Ile Trp Ser Val Lys Cys Cys Arg Ala Gln Leu Glu Ala
 20 25 30
 Arg Arg Ser Arg His Pro Ala Asp Gly Ala Gln Gln Glu Arg Cys Cys
 35 40 45
 Val Pro Pro Gly Glu Arg Cys Pro Ser Ala Pro Asp Asn Gly Glu Glu

50 55
Asn Val Pro Leu Ser Gly Lys Val
65 70

```
<210> 2429
<211> 428
<212> DNA
<213> Homo sapiens
```

```

<400> 2429
tcgcgctcggg tcggcgaggt tgacgctggt gatcctaagc cccatgagga cgacgacctc
60
atcgccgaga tggcggggct acaggctgct cagtcgatcc gggaatcctt gaacaaggct
120
gatgtcctgc tcaatggggg agagacgtcg accggtcgcg agccgggtgc gcttgctttg
180
ctggaacagg ccgtacatga gctggatggc actgggggatg ctgatcctcg cgccgctgag
240
ttggctgagc gcgcccgcc gatgtcgtat gacctcactg acctcgctgc ttcggctgct
300
ggccatgcgg ctcgggctga agctgatccg caacggcttg aggaattggg gggtcgtttg
360
gcggctattc agcggtggt gagggcgcgc accaccacc tcgacgatct cctcgactcc
420
actgcggc
428

```

```
<210> 2430
<211> 142
<212> PRT
<213> Homo sapiens
```

```

<400> 2430
Ser Arg Arg Val Gly Glu Val Asp Ala Val Asp Pro Lys Pro His Glu
 1          5          10          15
Asp Asp Asp Leu Ile Ala Glu Met Ala Gly Leu Gln Ala Ala Gln Ser
 20          25          30
Ile Arg Glu Ser Leu Asn Lys Ala Asp Val Leu Leu Asn Gly Val Glu
 35          40          45
Thr Ser Thr Gly Pro Gln Pro Gly Ala Leu Ala Leu Leu Glu Gln Ala
 50          55          60
Val His Glu Leu Asp Gly Thr Gly Asp Ala Asp Pro Arg Ala Ala Glu
 65          70          75          80
Leu Ala Glu Arg Ala Arg Gln Met Ser Tyr Asp Leu Thr Asp Leu Ala
 85          90          95
Ala Ser Val Ala Gly His Ala Ala Arg Ala Glu Ala Asp Pro Gln Arg
 100          105          110
Leu Glu Glu Leu Gly Gly Arg Leu Ala Ala Ile Gln Arg Leu Leu Arg
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Ala Arg Thr Thr Thr Leu Asp Asp Leu Leu Asp Ser Thr Ala
 130          135          140

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<210> 2431
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<212> DNA

<213> Homo sapiens

<400> 2431

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ttattatctg aggggtgatat caatttaagc aatgtaccgc ttttaaaaga tattgccacc
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attaatgcga aagaagttaa gaactatact gcttcttatg aattagtgag aagtatgcgt
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<210> 2432

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2432

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Thr Ile Ser Gly Ala Lys Asn Ala Ala Leu Pro Ile Leu Phe Ala Thr
 20          25          30
Leu Leu Ser Glu Gly Asp Ile Asn Leu Ser Asn Val Pro Leu Leu Lys
 35          40          45
Asp Ile Ala Thr Thr Ile Glu Leu Leu Lys Glu Leu Gly Ala Thr Ala
 50          55          60
Thr Gln Thr Gln His Cys Val His Ile Asn Ala Lys Glu Val Lys Asn
 65          70          75          80
Tyr Thr Ala Ser Tyr Glu Leu Val Arg Ser Met Arg Ala Ser Ile Leu
 85          90          95
Ala Leu Gly Pro Leu Val Ala Arg Phe Gly Glu Ala
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<210> 2433

<211> 655

<212> DNA

<213> Homo sapiens

<400> 2433

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180
ttgtgaagca gcacgtgact ataatctttt cccaggttta cccctgaagt tcaagtgcaa
240

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tgcccttgca cagcacagag caggggacga taggaggcgt gccttctcca gctgaaccac
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<212> PRT

<213> Homo sapiens

<400> 2434

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			20					25					30		
Lys	Ser	Lys	Gly	Cys	Val	Trp	Asn	Thr	Ala	Val	Thr	Glu	Lys	Val	Leu
		35					40					45			
Phe	Ala	Gln	Ser	Ala	Arg	Pro	Leu	Leu	Leu	Ser	Leu	Met	Ser	Pro	Asp
	50					55					60				
Trp	Ala	Phe	Ile	Val	Pro	Cys	Thr	Glu	Ala	Ser	Leu	Ser	Pro	Arg	Ser
65					70					75				80	
Cys	Leu	Phe	Gly	Arg	Gly	Ser	Thr	Asn	Gly	Ser	Thr	Leu	Pro	Pro	Thr
			85						90					95	
Pro	Thr	Ala	Arg	Pro	Ala	Gly	Pro	Val	Val	Gln	Leu	Glu	Lys	Ala	Arg
		100						105					110		
Leu	Leu	Ser	Pro	Ala	Leu	Cys	Ala	Gly	Ala	Leu	His	Leu	Asn		
		115				120				125					
Phe	Arg	Gly	Lys	Pro	Gly	Lys	Arg	Leu							
	130					135									

<210> 2435

<211> 401

<212> DNA

<213> Homo sapiens

<400> 2435

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 300
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<210> 2436

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2436

Lys	Leu	Ser	Phe	Thr	Gly	Ser	Thr	Pro	Val	Gly	Arg	Thr	Leu	Leu	Lys
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Xaa	Ala	Ala	Asp	Asn	Val	Leu	Arg	Thr	Ser	Met	Glu	Leu	Gly	Xaa	Asn
			20				25					30			
Ala	Pro	Phe	Ile	Val	Phe	Glu	Asp	Ala	Asp	Ile	Asp	Gln	Ala	Val	Gln
		35				40					45				
Gly	Ala	Met	Gly	Ala	Lys	Met	Arg	Asn	Ile	Gly	Glu	Ala	Cys	Thr	Ala
	50				55					60					
Ala	Asn	Arg	Phe	Leu	Val	His	Glu	Ser	Val	Ala	Glu	Glu	Phe	Ser	Glu
65				70				75						80	
Lys	Leu	Val	Ala	Glu	Phe	Glu	Lys	Leu	Asn	Leu	Gly	Asn	Gly	Met	Asp
			85					90						95	
Glu	Gly	Ile	Thr	Cys	Gly	Pro	Leu	Val	Glu	Ser	Lys	Ala	Leu	Glu	Ser
			100				105						110		
Ile	Ala	Ala	Leu	Val	Asp	Asp	Ala	Ala	Glu	Lys	Gly	Ala	Thr	Ile	Ser
		115					120						125		
Thr	Gly	Gly	Lys	Arg											
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<210> 2437

<211> 449

<212> DNA

<213> Homo sapiens

<400> 2437

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 180
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 300
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<210> 2438
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 2438
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 Val Leu Asp Gly Asn Arg Trp His Ser Lys Gly Gly Ala Gln Phe Arg
 35 40 45
 Glu Met Pro Met Tyr Gly Phe Gly Pro Met Pro Gln Pro Asp Leu Arg
 50 55 60
 Asp Leu Arg Gly Ser Ala Pro Arg Pro Pro Leu His Ile Cys Asp Pro
 65 70 75 80
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 85 90 95
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<210> 2439
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 <213> Homo sapiens

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<211> 1306

<212> PRT

<213> Homo sapiens

<400> 2440

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			20					25					30		
Val	Val	Phe	Ser	Asp	Val	Asn	Ser	Met	Tyr	Leu	Ser	Ser	Thr	Glu	Pro
		35				40					45				
Pro	Ala	Ala	Ala	Glu	Trp	Ala	Cys	Leu	Leu	Arg	Pro	Leu	Arg	Gly	Arg
	50					55				60					
Glu	Pro	Glu	Gly	Val	Trp	Asn	Leu	Leu	Ser	Ile	Val	Arg	Glu	Met	Phe
65				70					75					80	
Lys	Arg	Arg	Asp	Ser	Asn	Ala	Ala	Pro	Leu	Glu	Ile	Leu	Thr	Asp	
			85					90					95		
Gln	Cys	Leu	Thr	Tyr	Glu	Gln	Ile	Thr	Gly	Trp	Trp	Tyr	Ser	Val	Arg
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Thr	Ser	Ala	Ser	His	Ser	Ser	Ala	Ser	Gly	His	Thr	Gly	Arg	Ser	Asn
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Cys	Pro	Leu	His	Gly	Gly	Ser	Arg	Gly	Pro	Ser	Thr	Phe	Leu	Pro	Glu				
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	450				455					460									
Glu	Glu	Glu	Lys	Ala	Glu	Gly	Gly	Ala	Gly	Glu	Glu	His	Asp	Leu	Phe				
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Ala	Gly	Leu	Lys	Pro	Leu	Glu	Gln	Glu	Ser	Arg	Met	Glu	Val	Leu	Phe				
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Ala	Cys	Ala	Glu	Ala	Leu	His	Ala	His	Gly	Tyr	Ser	Ser	Glu	Ala	Ser				
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Arg	Leu	Thr	Val	Glu	Leu	Ala	Gln	Asp	Leu	Leu	Ala	Asn	Pro	Pro	Asp				
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Glu	Arg	Pro	Glu	Arg	His	Asn	Leu	Ala	Phe	Arg	Val	Gly	Met	Phe	Ala				
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Leu	Glu	Leu	Gln	Arg	Pro	Pro	Ala	Ser	Thr	Lys	Ala	Leu	Glu	Val	Lys				
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1763

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 Thr Glu Pro Val Thr Val Ala Ala Ala Val Thr Ala Ala Ala Thr
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 Pro His Leu Pro Cys Ser Pro Gln Tyr Leu Thr His Pro Ala His Pro
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 Ala His Pro Met Pro His Met Pro Arg Pro Ala Val Phe Pro Val Pro
 1250 1255 1260
 Ser Ser Ala Tyr Pro Gln Val Arg Pro Val Phe Cys Trp Gly Val Arg
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<211> 2244

<212> DNA

<213> Homo sapiens

<400> 2441

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 ctgccccctg gtggcagccc cgagtcactt ccagcagggc cccccaccc caagggccca
 300
 gcctcgggca ggaaggggtac aaagcccccg ccgtggttct gccacgaggt ctcttgaaa
 360
 tgaggggaac agcacagcga cgtccttgcg tcctaaatgc atcccctggg gccgttttt
 420
 cgccacacag gcttggcaaa atctctgcgt cactgagcag cattttaacc tcttgaatga
 480
 gatgcctccg accttttgga tcctctttct gcacctctca ggggacaggt cccgtctgta
 540
 cggcgctgcc tacgagaaac ccaagttcat tactgcagcc aaaggaaagg tgcaggcggg
 600
 gggaggctcc tgcaaggtga tgcgtctggc cataagtccc actgccttct cccacctgct
 660
 ggctgtgcc cagcagttcc ggaagcagac ccaggcccag gtgtacagtg aggacatggc
 720

cctgaacata ggctcggaa cagaaggcct gcaggtggaa gagaaggagc gccctgtgca
780
gaggetcagt agcgtcctgg ggcccttggg ggagcttctg cagccgctat tccccctgct
840
cagcctctcc aaggccagag tgcagacacc tgcggttgtt gccgattcag ggaagtcgaa
900
gggcaaagac aaggagagga aaacgtccac aggacaacac agcacagtcc agcctgaggt
960
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1020
ctctgtgttc gatgaaggga caatttcctc tgtgtcacga gaattttctc ttcaaagtct
1080
gtggaatcgc ctccataaag aagagacaga aggtggcgtg aaaaaggagg gaagaagcag
1140
agaccccaaa aagagaagcc tagcgaagaa gggcaggaag ggcagcatcc cccggaccat
1200
ccccctgac tgcattcatag tcgactcaga caacttcaag ttctgtctgg acccatcga
1260
ggaggccccag ggccagaaa tgctaactcc tgtctccatc acccaagaca ttttggaag
1320
attccaagac acattcacgt cgcgatgggc gggacatctg ggaagcaagc actttccag
1380
ccaggccccag tgggagcagg ccctgggcag ctgcagcggg ttcttcttct atggaatgga
1440
gagcttctctg tcccatatat tagtggagag attggctgcc atgaacttgc aagagtgcc
1500
ggtggcagtc ctgctggacc tggcacggtc ctaccagagc ttgaagaggc acatggagag
1560
cgtggagcac aggagatctg ttggccgttg ggaagccaat tggagaaacg gtgcgtctcc
1620
ttcagaagat gagtggcgac gaggcggtga accaaggcga ggcttctcag acctgaagg
1680
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1800
tgggggccca gcaattgcct ctgcccttgg ctctgcccct ctgccaaccc atccccacct
1860
cccggtctcc atccccagct ccagctcgc tctcccctc ctgggcctct cccagccct
1920
tggtgcagcc tcagccaggg accctcccc agcgaactcc cgcaaggcag ccgctggac
1980
ctcgagctct gcctgcctgt gtgcgccatg gggctctgct cggggctgga gctgcgtctc
2040
ttcccggggc caggacaagg gggcctccc cttgggggct ctggtgctga gttgcttaga
2100
ccagaagact attcagaccg tgagcctgtt tttgatttga gtgttccact aaacaaacaa
2160
caaaagccca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
2220
aaaaaaaaa aaaaaaaaaa aaaa
2244

<210> 2442

<211> 168
 <212> PRT
 <213> Homo sapiens

<400> 2442
 Met Gly Cys Arg Thr Lys Pro Ser Gly Ser Ala Gly Leu Asp Leu Pro
 1 5 10 15
 Pro Ile Ser Cys Trp Gly Pro Ser Thr Cys Leu Cys Pro Trp Leu Cys
 20 25 30
 Pro Ser Ala Asn Pro Ser Pro Pro Gly Ser His Pro Gln Leu Pro
 35 40 45
 Ala Arg Ser Pro Leu Pro Gly Pro Leu Pro Ser Pro Trp Cys Ser Leu
 50 55 60
 Ser Gln Gly Pro Ser Pro Ser Asp Phe Pro Gln Gly Ser Arg Leu Asp
 65 70 75 80
 Leu Glu Leu Cys Leu Pro Val Cys Ala Met Gly Ser Ala Ser Gly Leu
 85 90 95
 Glu Leu Arg Leu Phe Pro Gly Pro Gly Gln Gly Arg Pro Pro Leu Gly
 100 105 110
 Gly Ala Gly Ala Glu Leu Leu Arg Pro Glu Asp Tyr Ser Asp Arg Glu
 115 120 125
 Pro Val Phe Asp Leu Ser Val Pro Leu Asn Lys Gln Gln Lys Pro Lys
 130 135 140
 Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 145 150 155 160
 Lys Lys Lys Lys Lys Lys Lys Lys
 165

<210> 2443
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 2443
 nccgtgcgcg ctatcttgcg tcgtacgccg tccagggaag atgaaaaaat gctacaaacg
 60
 gccgatggac gattgcgcat tgatatcgaa tccatgcgca cctttgtaga gggcaaagaa
 120
 gtccatttga cgaaaaacga atttttaatt gtgcagactt tgtttacgca cccaataag
 180
 atctatacgc gcgatgaaat tatcgaagtc accttcggaa tggattatga ggcctttgac
 240
 cgtgccattg ataccatat caaaaacatt cgccagaaga ttgaagcgga tccgaaaaac
 300
 cccgtctata tccgcacggt ttatggtgtc gggatatctgc ccggagggtt tgatgaagct
 360
 t
 361

<210> 2444
 <211> 120
 <212> PRT
 <213> Homo sapiens

<400> 2444

Xaa Val Arg Ala Ile Leu Arg Arg Thr Pro Ser Arg Glu Asp Glu Lys
 1 5 10 15
 Met Leu Gln Thr Ala Asp Gly Arg Leu Arg Ile Asp Ile Glu Ser Met
 20 25 30
 Arg Thr Phe Val Glu Gly Lys Glu Val His Leu Thr Lys Asn Glu Phe
 35 40 45
 Leu Ile Val Gln Thr Leu Phe Thr His Pro Asn Lys Ile Tyr Thr Arg
 50 55 60
 Asp Glu Ile Ile Glu Val Thr Phe Gly Met Asp Tyr Glu Ala Phe Asp
 65 70 75 80
 Arg Ala Ile Asp Thr His Ile Lys Asn Ile Arg Gln Lys Ile Glu Ala
 85 90 95
 Asp Pro Lys Asn Pro Val Tyr Ile Arg Thr Val Tyr Gly Val Gly Tyr
 100 105 110
 Leu Pro Gly Gly Phe Asp Glu Ala
 115 120

<210> 2445

<211> 403

<212> DNA

<213> Homo sapiens

<400> 2445

agatctgttg aatgaagcag gtgccactta gacattcact tcactgactc caaccacaac
 60
 ctcccccttca tttgatatcc tgctcttggc agaaggatgg agaaagagca tcgcacaaag
 120
 aggaagcatg tttatcctgt tcagattact gcttctgccca ggctgctgct gctgttggtg
 180
 tctgcacatt tgctctttat taagcaaattg tcagagctgg gtgctggcaa gggaatcccc
 240
 tgtatattaca caggtaaacc tgagagccag agggccccc aaaccatcctgg ctgcgagggga
 300
 caagctatta gagttaataa cagtgcactg gcattccttc aaaatcctaa tggaagcata
 360
 aataaaaaaga ggaaagtccc ctttacccaa gaacctgaaa aan
 403

<210> 2446

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2446

Met Glu Lys Glu His Arg Thr Lys Arg Lys His Val Tyr Pro Val Gln
 1 5 10 15
 Ile Thr Ala Ser Ala Arg Leu Leu Leu Leu Gly Ser Ala His Leu
 20 25 30
 Leu Phe Ile Lys Gln Met Ser Glu Leu Gly Ala Gly Lys Gly Ile Pro
 35 40 45
 Cys Ile Tyr Thr Gly Lys Pro Glu Ser Gln Arg Ala Pro Asn His Pro
 50 55 60
 Gly Cys Glu Gly Gln Ala Ile Arg Val Asn Asn Ser Ala Leu Ala Phe

```

65              70              75              80
Leu Gln Asn Pro Asn Gly Ser Ile Asn Lys Lys Arg Lys Val Pro Phe
              85              90              95
Thr Gln Glu Pro Glu Lys
              100

```

<210> 2447

<211> 744

<212> DNA

<213> Homo sapiens

<400> 2447

```

nacgcgtcga ggtttgccag tcacgggttg cgggtggggc aggtactact caccgtcaat
60
gacctggtgc ggcccacttc gtaccgcaat gcctgggtcaa ccctcgacac ttgctggggg
120
ttgggcgtcg tgccgatcgt caacgagaac gacacggtcg ccaccggaga aattcggttt
180
ggcgataatg atcggttgc tgccctggta gccgagctgg tgcgcgtca agccctcatt
240
ctgctctctg acgttgacgc cttgtacacc gcccatccgg attcaccgga tgctcgtcgc
300
gtggagggttg tggaggacat cgatgcattg gatgtcgata ccataaaagc tggttcgggg
360
gtgggaaccg gcggcatgac cacgaaactt gaagcgcgcc gaatggccac ctgtgccggg
420
gtaccggtgg tactcgcagc ggcggtggat gcccgcggacg ttctggctgg tgccccctg
480
ggtacctact tccgcccgtt ggcgacgcga cggccccgac ggttgctgtg gttggccgac
540
gctgccaccc cgcagggaca gatcgtcatc gacgacggag ctgtcgaagc ttgacacag
600
cgtcattcct cgttggttggc ggtgggtgtg actcgggtac acggggattt ccaagcaggc
660
gaccagtgga cgatcctggc ctccgacggt cgagttgttg gtcgcggtat cgcccagttc
720
tcccatgatg aggtgcgcgt catg
744

```

<210> 2448

<211> 248

<212> PRT

<213> Homo sapiens

<400> 2448

```

Xaa Ala Ser Arg Phe Ala Ser His Gly Leu Arg Val Gly Gln Val Leu
1          5          10          15
Leu Thr Val Asn Asp Leu Val Arg Pro Thr Ser Tyr Arg Asn Ala Trp
          20          25          30
Ser Thr Leu Asp Thr Leu Leu Gly Leu Gly Val Val Pro Ile Val Asn
          35          40          45
Glu Asn Asp Thr Val Ala Thr Gly Glu Ile Arg Phe Gly Asp Asn Asp
          50          55          60
Arg Leu Ala Ala Leu Val Ala Glu Leu Val Arg Ala Gln Ala Leu Ile

```

```

65          70          75          80
Leu Leu Ser Asp Val Asp Ala Leu Tyr Thr Ala His Pro Asp Ser Pro
      85          90          95
Asp Ala Arg Arg Val Glu Val Val Glu Asp Ile Asp Ala Leu Asp Val
      100         105         110
Asp Thr His Lys Ala Gly Ser Gly Val Gly Thr Gly Gly Met Thr Thr
      115         120         125
Lys Leu Glu Ala Ala Arg Met Ala Thr Cys Ala Gly Val Pro Val Val
      130         135         140
Leu Ala Ala Ala Val Asp Ala Pro Asp Val Leu Ala Gly Ala Pro Val
145         150         155         160
Gly Thr Tyr Phe Arg Pro Leu Ala Thr Arg Arg Pro Arg Arg Leu Leu
      165         170         175
Trp Leu Ala Asp Ala Ala Thr Pro Gln Gly Gln Ile Val Ile Asp Asp
      180         185         190
Gly Ala Val Glu Ala Leu Thr Gln Arg His Ser Ser Leu Leu Ala Val
      195         200         205
Gly Val Thr Arg Val His Gly Asp Phe Gln Ala Gly Asp Pro Val Thr
      210         215         220
Ile Leu Ala Ser Asp Gly Arg Val Val Gly Arg Gly Ile Ala Gln Phe
225         230         235         240
Ser His Asp Glu Val Arg Val Met
      245

```

<210> 2449

<211> 296

<212> DNA

<213> Homo sapiens

<400> 2449

```

gtgcactttg ttacagccct ggaacatgaa cacatgccgt catcaactcc ccaaaatctc
60
ctactgtctt cccctcctcc ctgggccctg tcctatcccc agaggccaga caggccttcc
120
tcgcatgcaa gagtctccct cgccctgccg gacagtggcc tccatctacc tgctgtctt
180
gctggactcc agaacactcc agtcctttcc cccttggggg ttgggggggg cccccctt
240
ttttcccccc ctttccctct tcattccaca ggaggccagc ctcaacatcc cncccc
296

```

<210> 2450

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2450

```

Met Asn Thr Cys Arg His Gln Leu Pro Lys Ile Ser Tyr Cys Ser Pro
1          5          10          15
Leu Leu Pro Gly Pro Cys Pro Ile Pro Arg Gly Gln Thr Gly Leu Pro
      20         25         30
Arg Met Gln Glu Ser Pro Ser Pro Cys Arg Thr Val Ala Ser Ile Tyr
      35         40         45
Leu Pro Val Leu Leu Asp Ser Arg Thr Leu Gln Ser Phe Pro Pro Trp

```

```

      50              55              60
Gly Leu Gly Gly Ala Pro Pro Phe Phe Pro Pro Leu Ser Leu Phe Ile
65              70              75              80
Pro Gln Glu Ala Ser Leu Asn Ile Pro Xaa
      85              90

```

<210> 2451

<211> 589

<212> DNA

<213> Homo sapiens

<400> 2451

```

nacgcgtgac tggattgctc aacgggtgag gaatcgagcg gttacgatgt cgggccgac
60
tgcaacgatg atcttgtgag cgatgtattg accggtgtgt gggccgatct tgtgggccag
120
gagaaggctg tgggggtcct gcgtcgtgcc gccgaatcgc agccggggcg ctcgtcccat
180acgcatggct cattacgggt ccgcctggat caggteggtc gaatgctgcg      240
aaggcctttg cagcggcgct acagtgcgtc gaccatggat gcgggcagtg caatgcctgt
300
cgaaccngcc tgtcaggcgc ccactctgac gtcaccctcg tgcgtactga ggcgtgtct
360
attggcgtcg attgaggtcg tgaaatgggt ttgttcgagc gggcgatgaa ttccgggtccc
420
cggggcgtcc ccagggttgt cgtcgtcgaa gatgccgacc gcactactga acgcggagct
480
gacgccttgc ttaaagctat cgaggagcct gcgccgaaaa ccgtctggtt gctgtgtgcc
540
cctactccag aggacgtcat cgtcacgatc aggtcgagat gtcggcgcc
589

```

<210> 2452

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2452

```

Leu Asp Cys Ser Thr Gly Glu Glu Ser Ser Gly Tyr Asp Val Gly Pro
 1              5              10              15
Ile Cys Asn Asp Asp Leu Val Ser Asp Val Leu Thr Gly Val Trp Ala
      20              25              30
Asp Leu Val Gly Gln Glu Lys Ala Val Gly Val Leu Arg Arg Ala Ala
      35              40              45
Glu Ser Gln Pro Gly Arg Ser Ser His Ala Met Ser His Ala Trp Leu
      50              55              60
Ile Thr Gly Pro Pro Gly Ser Gly Arg Ser Asn Ala Ala Lys Ala Phe
65              70              75              80
Ala Ala Ala Leu Gln Cys Val Asp His Gly Cys Gly Gln Cys Asn Ala
      85              90              95
Cys Arg Thr Xaa Leu Ser Gly Ala His Pro Asp Val Thr Leu Val Arg
      100              105              110
Thr Glu Ala Leu Ser Ile Gly Val Asp
      115              120

```


<210> 2453
 <211> 695
 <212> DNA
 <213> Homo sapiens

<400> 2453
 nnacgcgtca gccatctgtg agtgctcaca ctatacacac atccccgggc aactcaggg
 60
 agattcacac attcctacga gcacacatgt gcctgcatga gttattcccc atgtgaacac
 120
 acagggttggc acacgcacat gcccctgggt atgctcatgt ccattcatcc atcccagcct
 180
 gtgcaagtcc tctcactcct gtgttcacac ctatgcccac atgaaccaag ggacacacat
 240
 gcacaccctt atgtggtgca cacacactcg tgcacacgga gccacaccag cacatgctca
 300
 gaggcatttg tgtgcgtggg catttgtagc atgactcaga acggagtatg ggggtggcgg
 360
 gcgtgggtgg ggaggtccca tcagcccgcc tctgaaacct tcccaacctg cccatcctgg
 420
 cccaggcact gtgtctccgg cttgggcttc agccccggac cccaggacac cccggacaaa
 480
 gaggagctgc tctcgtctga agcctgctac gaatgcagga tcaatggcct ctcccctcgg
 540
 gaccggccac gacgcagtgc ccacaggggac caccaggtga catgggtgct gcactaggca
 600
 ggggtggcca ggaatgggt gagtgtggga aagaggctgt ggacccgact tagtcatgtc
 660
 agccccccga agaaggagca ccaggctcca gatct
 695

<210> 2454
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 2454
 Met Ser Tyr Ser Pro Cys Glu His Thr Gly Trp His Thr His Met Pro
 1 5 10 15
 Leu Gly Met Leu Met Ser Ile His Pro Ser Gln Pro Val His Val Leu
 20 25 30
 Ser Leu Leu Cys Ser His Leu Cys Pro Asn Glu Pro Arg Asp Thr His
 35 40 45
 Ala His Pro Tyr Val Val His Thr His Ser Cys Thr Arg Ser His Thr
 50 55 60
 Ser Thr Cys Ser Glu Ala Phe Val Cys Val Gly Ile Cys Ser Met Thr
 65 70 75 80
 Gln Asn Gly Val Trp Gly Gly Ala Ala Trp Leu Gly Arg Ser His Gln
 85 90 95
 Pro Ala Ser Glu Thr Leu Pro Thr Cys Pro Ser Trp Pro Arg His Cys
 100 105 110
 Val Ser Gly Leu Gly Phe Ser Pro Gly Pro Gln Asp Thr Pro Asp Lys
 115 120 125
 Glu Glu Leu Leu Ser Ser Glu Ala Cys Tyr Glu Cys Arg Ile Asn Gly

130		135		140
Leu Ser Pro Arg Asp Arg	Pro Arg Arg Ser	Ala His Arg Asp His	Gln	
145	150	155	160	
Val Thr Trp Val Leu His				
	165			

<210> 2455

<211> 378

<212> DNA

<213> Homo sapiens

<400> 2455

```

acgcgtcggc agaagcgtca gctgaccgtc ggagccgata tgtccccagg cgtcgtcagc
60
ggaaccgcgc agaaggaaat ccacgcgctg ccgatcatga aggcgctccc catgggcgtc
120
aaagaactcg ttctggggcga atcgaagtgg caggacgagt tgatcaacaa cttcatcgtc
180
gcgctgtttg caggcgtggg gttgctgttc gcggtgctgg tgctgctgta ccggcgcttg
240
ctgccgccgt tcatcaacgt gatgtcgtg gcggtggcac cgctgggcgg gttgatcggc
300
ctgtggctga ccaacacgcc gatctcgatg ccggtctata tcggcttgat catgctgctc
360
ggcatcgtcg ccaagaat
378

```

<210> 2456

<211> 126

<212> PRT

<213> Homo sapiens

<400> 2456

Thr Arg Arg Gln Lys Arg Gln Leu Thr Val Gly Ala Asp Leu Ser Pro	
1 5 10 15	
Gly Val Val Ser Gly Thr Ala Gln Lys Glu Ile His Ala Leu Pro Ile	
20 25 30	
Met Lys Ala Leu Pro Met Gly Val Lys Glu Leu Val Leu Gly Glu Ser	
35 40 45	
Lys Trp Gln Asp Glu Leu Ile Asn Asn Phe Ile Val Ala Leu Phe Ala	
50 55 60	
Gly Val Val Leu Leu Phe Ala Val Leu Val Leu Leu Tyr Arg Arg Leu	
65 70 75 80	
Leu Pro Pro Phe Ile Asn Val Met Ser Leu Ala Val Ala Pro Leu Gly	
85 90 95	
Gly Leu Ile Gly Leu Trp Leu Thr Asn Thr Pro Ile Ser Met Pro Val	
100 105 110	
Tyr Ile Gly Leu Ile Met Leu Leu Gly Ile Val Ala Lys Asn	
115 120 125	

<210> 2457

<211> 754

<212> DNA

<213> Homo sapiens

<400> 2457
 cctaggaatt taccaccatc aaagacttac attaaccagc tatccatgaa ctcacctgag
 60
 atgagcgaat gtgacatctt gcacactctg cgatgggtctt ctgggtccg gatcagctcc
 120
 tatgtcaact ggataaagga tcaccttatac aaacagggaa tgaaggctga gcatgctagc
 180
 tcgcttctag aactggcatc caccactaag tgtagctcag tgaaatatga tgttgaaata
 240
 gtagaggaat acttcgctcg acagatctca tccttctgta gtatcgactg tgccaccatc
 300
 ttgcagctgc atgaaattcc cagtctgcag tccatctaca cccttgatgc cgcgattcta
 360
 aaaggcccag gtcttttttg gatgagcatt tttctaagat ggctgctgag actgacctc
 420
 ataagtcgtc tgagattacc aagaacctac ttccagccac gctgcaactc attgacacct
 480
 atgcctcgtt caccagagcc tatttgctgc aaaactttaa tgaagagggga acaactgaga
 540
 aaccttccaa ggagaaactg caaggctttg ctgctgtttt ggctattggc tctagcaggt
 600
 gcaaggcaaa tactctgggt ccgacactgg ttcagaattt gccatcgta gtgcagactg
 660
 tgtgtgagtc ctggaacaac atcaatacca atgaatttcc caatattgga tcctggcgca
 720
 atgcctttgc caatgacacc atcccttcac gcgt
 754

<210> 2458

<211> 236

<212> PRT

<213> Homo sapiens

<400> 2458

Met	Asn	Ser	Pro	Glu	Met	Ser	Glu	Cys	Asp	Ile	Leu	His	Thr	Leu	Arg
1				5				10						15	
Trp	Ser	Ser	Arg	Leu	Arg	Ile	Ser	Ser	Tyr	Val	Asn	Trp	Ile	Lys	Asp
			20					25					30		
His	Leu	Ile	Lys	Gln	Gly	Met	Lys	Ala	Glu	His	Ala	Ser	Ser	Leu	Leu
			35				40					45			
Glu	Leu	Ala	Ser	Thr	Thr	Lys	Cys	Ser	Ser	Val	Lys	Tyr	Asp	Val	Glu
			50				55				60				
Ile	Val	Glu	Glu	Tyr	Phe	Ala	Arg	Gln	Ile	Ser	Ser	Phe	Cys	Ser	Ile
65					70				75					80	
Asp	Cys	Ala	Thr	Ile	Leu	Gln	Leu	His	Glu	Ile	Pro	Ser	Leu	Gln	Ser
				85				90					95		
Ile	Tyr	Thr	Leu	Asp	Ala	Ala	Ile	Leu	Lys	Gly	Pro	Gly	Leu	Phe	Gly
			100				105						110		
Met	Ser	Ile	Phe	Leu	Arg	Trp	Leu	Leu	Arg	Leu	Ile	Leu	Ile	Ser	Arg
			115				120					125			
Leu	Arg	Leu	Pro	Arg	Thr	Tyr	Phe	Gln	Pro	Arg	Cys	Asn	Ser	Leu	Thr
			130			135					140				
Pro	Met	His	Arg	Ser	Pro	Glu	Pro	Ile	Cys	Cys	Lys	Thr	Leu	Met	Lys

```

145          150          155          160
Arg Glu Gln Leu Arg Asn Leu Pro Arg Arg Asn Cys Lys Ala Leu Leu
          165          170          175
Leu Phe Trp Leu Leu Ala Leu Ala Gly Ala Arg Gln Ile Leu Trp Val
          180          185          190
Arg His Trp Phe Arg Ile Cys His Arg Gln Cys Arg Leu Cys Val Ser
          195          200          205
Pro Gly Thr Thr Ser Ile Pro Met Asn Phe Pro Ile Leu Asp Pro Gly
          210          215          220
Ala Met Pro Leu Pro Met Thr Pro Ser Leu His Ala
225          230          235

```

<210> 2459
<211> 382
<212> DNA
<213> Homo sapiens

```

<400> 2459
accggtgcac agatcggttct ggccgcgtgc actgccccgc tcaagcaaat cgctatcaac
60
gctgggtcttg agggggggcgt cgtggctgag aaggtcgctg gtctgccccgc aggacagggc
120
ctcaacgcgg ccaatgacga gtatgtcgac atggttagagg ccggcatcat tgaccgggcc
180
aagggtgacc gtteggctct gcagaacgcc gcgtccatcg cgccctgtt cctcaccact
240
gaagccgtca tcgctgacaa gcccgagcct gttaaggctc ccgctggcgg cggtgatatg
300
gacggtatgg gtggcatggg cggcatgatg tgatcgtgta ttgccttcgc tgatttgagt
360
gggatgccac tttgccccag gc
382

```

<210> 2460
<211> 110
<212> PRT
<213> Homo sapiens

```

<400> 2460
Thr Gly Ala Gln Ile Val Leu Ala Ala Cys Thr Ala Pro Leu Lys Gln
1      5      10      15
Ile Ala Ile Asn Ala Gly Leu Glu Gly Gly Val Val Ala Glu Lys Val
20     25     30
Ala Gly Leu Pro Ala Gly Gln Gly Leu Asn Ala Ala Asn Asp Glu Tyr
35     40     45
Val Asp Met Val Glu Ala Gly Ile Ile Asp Pro Ala Lys Val Thr Arg
50     55     60
Ser Ala Leu Gln Asn Ala Ala Ser Ile Ala Ala Leu Phe Leu Thr Thr
65     70     75     80
Glu Ala Val Ile Ala Asp Lys Pro Glu Pro Val Lys Ala Pro Ala Gly
85     90     95
Gly Gly Asp Met Asp Gly Met Gly Gly Met Gly Gly Met Met
100    105    110

```

<210> 2461
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 2461
 tccggacaaa agggttcaat cgaagtatgg ttagcctttt ccaagtcgcc aggacggacc
 60
 tgcaatgctg tttgtcgtca tgctcggggg caagcaccca cgggctaaaa tcgaaattca
 120
 cgatgtggta ttgcagtcg cggatacgtc gcaacacacc tacaccaat tgcgcgacgg
 180
 ctgggttcggc agccctaagg tgtgcatatc gatgcgtgga tggccgtcga tggcgtcgac
 240
 ggctggaaaag tcgaactcag ccagatggcg ccgcctgccg acgcgcatca cctgtacttc
 300
 atcaacctcg gcggtacga ggccaacgct tttggcgagg cccatcatta cctgctgggtg
 360
 gtcgccccggg acaaacagga agccaagcgc aaggggcagc ggcaaatgtt gcaacactgg
 420
 tcccaggccc acaccgatgg cgtaatggat atcgacgact gcttgccgat tgatctgggtg
 480
 gacggtcgct atgttcacct ggtgcaaggc ccgcaccagc cgatcatcca gcacaacgac
 540
 tacatcatcc tgccgcga
 558

<210> 2462
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 2462
 Met Val Ser Leu Phe Gln Val Ala Arg Thr Asp Leu Gln Cys Cys Leu
 1 5 10 15
 Ser Ser Cys Ser Gly Ala Ser Thr His Gly Leu Lys Ser Lys Phe Thr
 20 25 30
 Met Trp Tyr Ser Gln Ser Arg Ile Arg Cys Asn Thr Pro Thr Pro Asn
 35 40 45
 Cys Ala Thr Ala Gly Ser Ala Ala Leu Arg Cys Ala Tyr Arg Cys Val
 50 55 60
 Asp Gly Arg Arg Trp Arg Arg Arg Leu Glu Ser Arg Thr Gln Pro Asp
 65 70 75 80
 Gly Ala Ala Cys Arg Arg Ala Ser Pro Val Leu His Gln Pro Arg Arg
 85 90 95
 Leu Arg Gly Gln Arg Phe Trp Arg Gly Pro Ser Leu Pro Ala Gly Gly
 100 105 110
 Arg Pro Gly Gln Thr Gly Ser Gln Ala Gln Gly Ala Ala Asn Val
 115 120 125
 Ala Thr Leu Val Pro Gly Pro His Arg Trp Arg Asn Gly Tyr Arg Arg
 130 135 140
 Leu Leu Ala Asp
 145

<210> 2463
 <211> 333
 <212> DNA
 <213> Homo sapiens

<400> 2463
 cccagggggt aagccatgag cctgttgagc caagtggccc gggcgccgtt gagcgccaag
 60
 ttcggcctgc tgattattct gttatacgtc gcgctggcgc tgtgngcgcc gctgctggcg
 120
 ccctatggcg aaaccacagt ggtgggtgaa ggcttcgcgc cgtggagcgg ccagtttttg
 180
 ctgggcaccg ataacctggg gcgcgacatg ttcagccgcc tgatgtacgg cgcgcgcaat
 240
 accttgggca ttgccttcct gacgacgacg ctggcgtttc tgctcggtgg tttgagcggg
 300
 ttggtcgcgg cgatcaaggg cggttgggtc gac
 333

<210> 2464
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2464
 Met Ser Leu Leu Ser Gln Val Ala Arg Ala Pro Leu Ser Ala Lys Phe
 1 5 10 15
 Gly Leu Leu Ile Ile Leu Leu Tyr Val Ala Leu Ala Leu Xaa Ala Pro
 20 25 30
 Leu Leu Ala Pro Tyr Gly Glu Thr Gln Val Val Gly Glu Gly Phe Ala
 35 40 45
 Pro Trp Ser Gly Gln Phe Leu Leu Gly Thr Asp Asn Leu Gly Arg Asp
 50 55 60
 Met Phe Ser Arg Leu Met Tyr Gly Ala Arg Asn Thr Leu Gly Ile Ala
 65 70 75 80
 Phe Leu Thr Thr Thr Leu Ala Phe Leu Leu Gly Gly Leu Ser Gly Leu
 85 90 95
 Val Ala Ala Ile Lys Gly Gly Trp Val Asp
 100 105

<210> 2465
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 2465
 nntcatgagg acatttccct catatttggg ggtggtaaata ccctcctggg acacggggaa
 60
 atgaccagag gctggcgggc cacctggcag gaacagatgc cagctctgct gcagccatcg
 120
 ccccttgagc ggggtggctct gtgcctcttt ctgcactgct ggtgggtggg gctgttggct
 180
 ggggtgatga taccggctgc cagagatggc tcaggtgcca gctgctgggc tatctcaggc
 240

actggctgct gggctatctc gggcgccggc tgctgggcta tctcaggcgc tggctgctgc
 300
 tgggctgtct cgggtgctgg ctgttgggac gtctcctgtc ctggcactgg gctctcgggt
 360
 gctgggtgcc agctgctgcc taccttgcaac tgggctctgg gcactcactg cactcgggct
 420
 tttccatctc cgac
 434

<210> 2466
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 2466
 Trp Ile Pro Ala Ala Arg Asp Gly Ser Gly Ala Ser Cys Trp Ala Ile
 1 5 10 15
 Ser Gly Thr Gly Cys Trp Ala Ile Ser Gly Ala Gly Cys Trp Ala Ile
 20 25 30
 Ser Gly Ala Gly Cys Cys Trp Ala Val Ser Gly Ala Gly Cys Trp Asp
 35 40 45
 Val Ser Cys Pro Gly Thr Gly Leu Ser Gly Ala Gly Cys Gln Leu Leu
 50 55 60
 Pro Thr Leu His Trp Ala Leu Gly Thr His Cys Thr Arg Ala Phe Pro
 65 70 75 80
 Ser Pro

<210> 2467
 <211> 306
 <212> DNA
 <213> Homo sapiens

<400> 2467
 atggactcca ccggcaccgg agcaggggggt aaggggaaga agggagcggc cgggcgcaag
 60
 gtcggcgggc caaggaagaa gtcggtgtcg aggtccgtga aggccggtct ccagttcccc
 120
 gtcggcgca tcgggcgcta cttgaagaag ggccgctacg cgcagcgtgt cggcaccggc
 180
 gccccgtct acctcgccgc tgtcctcgaa tacctcgccg ctgaggttct ggagctcgcc
 240
 ggtaatgctg ccaggggacaa caagaagact cgcattattc cgcgccacgt gcttctggcg
 300
 atccgg
 306

<210> 2468
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2468
 Met Asp Ser Thr Gly Thr Gly Ala Gly Gly Lys Gly Lys Lys Gly Ala

```

      1             5             10             15
Ala Gly Arg Lys Val Gly Gly Pro Arg Lys Lys Ser Val Ser Arg Ser
      20             25             30
Val Lys Ala Gly Leu Gln Phe Pro Val Gly Arg Ile Gly Arg Tyr Leu
      35             40             45
Lys Lys Gly Arg Tyr Ala Gln Arg Val Gly Thr Gly Ala Pro Val Tyr
      50             55             60
Leu Ala Ala Val Leu Glu Tyr Leu Ala Ala Glu Val Leu Glu Leu Ala
65             70             75             80
Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His
      85             90             95
Val Leu Leu Ala Ile Arg
      100

```

<210> 2469

<211> 489

<212> DNA

<213> Homo sapiens

<400> 2469

```

gccggcggtgg cacatggctt ccctgaagcc agcattgccc tggccaagga agctttgcag
60
aacagatgag atttcagctg ggacttgcag ccaagtggga tttggccttt tggggagaag
120
ggaaagggca ttcaaaggcc agggacagag tatggtcaaa ggcatggaga tgaggaagag
180
gggaccagag cagagggtca ggttggaag cgagttgggg tcaatctgca aaggggctga
240
cgtgccaggt aaaaaacagg agcacagttt agttttgtcg gatcatttca ggtggaaggg
300
cagtgggaat gttggagaaa acactttttg gtgtcgttac attgaatctg ctcatctata
360
agaataaaac tttatttcat agagttattg tatggctcaa aataggtatg aagaattaag
420
aaaaagaatt ttagatttaa aatgaaaagg cacctacaaa agtagagtgg tagagttacc
480
aacgtggag
489

```

<210> 2470

<211> 115

<212> PRT

<213> Homo sapiens

<400> 2470

```

Met Ala Ser Leu Lys Pro Ala Leu Pro Trp Pro Arg Lys Leu Cys Arg
      1             5             10             15
Thr Asp Glu Ile Ser Ala Gly Thr Cys Ser Gln Val Gly Phe Gly Leu
      20             25             30
Leu Gly Arg Arg Glu Arg Ala Phe Lys Gly Gln Gly Gln Ser Met Val
      35             40             45
Lys Gly Met Glu Met Arg Lys Arg Gly Pro Glu Gln Arg Val Arg Leu
      50             55             60
Glu Ser Glu Leu Gly Ser Ile Cys Lys Gly Ala Asp Val Pro Gly Lys

```


<400> 2472

Met	Thr	Phe	Ser	Phe	Tyr	Pro	Thr	Glu	Leu	Ser	Leu	Trp	Ile	Gln	Ile
1				5					10					15	
Phe	Gln	Phe	Phe	Lys	Gly	Leu	Tyr	Val	Met	Gly	Thr	Leu	Asp	Phe	Pro
			20					25					30		
Val	Asp	Arg	Ser	Asn	Val	Leu	Ser	Val	Ala	Cys	Met	Val	Ile	Ala	Gly
		35				40						45			
Gly	Glu	Leu	Lys	Val	Gly	Thr	Leu	Glu	Asn	Pro	Leu	Glu	Lys	Glu	Gln

```

      50              55              60
Lys Leu Leu Ile Leu Leu Arg Ala Ser Glu Gly Val Phe Cys Asp Arg
65              70              75              80
Met Asn Gly Ile His Ile Asp Pro Gly Thr Ile Gly Val Tyr Gly Lys
      85              90              95
Val His Leu Tyr Ser Ala Tyr Pro Lys Asn Ser Trp Thr His Leu Gly
      100              105              110
Ala Asp Ile Ala Ser Gly Asn Glu Arg Ile Ile Val Glu Asp Ala Val
      115              120              125
Asp Trp Arg Pro His Asp Lys Ile Val Leu Ser Ser Ser Ser Tyr Glu
      130              135              140
Pro His Glu Ala Glu Val Leu Thr Val Lys Glu Val Lys Gly His His
145              150              155              160
Val Arg Ile Tyr Glu Arg Leu Lys His Arg His Ile Gly Ser Val His
      165              170              175
Val Thr Glu Asp Gly
      180

```

<210> 2473

<211> 698

<212> DNA

<213> Homo sapiens

<400> 2473

```

nngtgcacca agaaatggca gcctgacaag ctggtggtgg tatggactcg gcggaaccga
60
cgcattctgct ccaaggccca cagctggcag ccgnnggcatt ccagaaccca taccggggca
120
ccgtggtgtg gatggtacnc tgagaatgtg gacattctctg tgaccctcta cagggacccc
180
cacgtggacc agtatgaggg caaagagtgg acatttatta ttgaaaatga gtctaagggg
240
cagcggaagg tgctggccac ggccgaggtg gacctggccc gccatgccag ggcccgtgcc
300
ntgtccaagt ccnactgag gctgcggtg aagccaaagt cagtgaagac ggtgcaggct
360
gagctgagcc tcaactcttc cggggtgctg ctgcgggagg gccgtgccac ggacgatgac
420
atgcagagtc tcgcaagcct catgagtgtg aagcctagt atgtgggcaa cttggatgac
480
tttgctgaga gtgatgaaga tgaggctcat ggcccaggag ccccgagggc ccgggctcga
540
gtccccagc caggtgggct cacagcctgc tgtggatcga gactgccaag acctggggag
600
ggagggttac ccgggcccac agccacttgc tgtgcccgcc ctgtgatggg aactcattac
660
tgcccaggca gtcccaccca acccagcagc ctcaattg
698

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<210> 2474

<211> 232

<212> PRT

<213> Homo sapiens

<400> 2474

Xaa Cys Thr Lys Lys Trp Gln Pro Asp Lys Leu Val Val Val Trp Thr
 1 5 10 15
 Arg Arg Asn Arg Arg Ile Cys Ser Lys Ala His Ser Trp Gln Pro Xaa
 20 25 30
 Ala Ser Arg Thr His Thr Gly Ala Pro Trp Cys Gly Trp Tyr Xaa Glu
 35 40 45
 Asn Val Asp Ile Ser Val Thr Leu Tyr Arg Asp Pro His Val Asp Gln
 50 55 60
 Tyr Glu Ala Lys Glu Trp Thr Phe Ile Ile Glu Asn Glu Ser Lys Gly
 65 70 75 80
 Gln Arg Lys Val Leu Ala Thr Ala Glu Val Asp Leu Ala Arg His Ala
 85 90 95
 Arg Ala Arg Ala Xaa Ser Lys Ser Xaa Leu Arg Leu Arg Leu Lys Pro
 100 105 110
 Lys Ser Val Lys Thr Val Gln Ala Glu Leu Ser Leu Thr Leu Ser Gly
 115 120 125
 Val Leu Leu Arg Glu Gly Arg Ala Thr Asp Asp Asp Met Gln Ser Leu
 130 135 140
 Ala Ser Leu Met Ser Val Lys Pro Ser Asp Val Gly Asn Leu Asp Asp
 145 150 155 160
 Phe Ala Glu Ser Asp Glu Asp Glu Ala His Gly Pro Gly Ala Pro Glu
 165 170 175
 Ala Arg Ala Arg Val Pro Gln Pro Gly Gly Leu Thr Ala Cys Cys Gly
 180 185 190
 Ser Arg Leu Pro Arg Pro Gly Glu Gly Gly Leu Pro Gly Pro Pro Ala
 195 200 205
 Thr Cys Cys Ala Arg Pro Val Met Gly Thr His Tyr Cys Pro Gly Ser
 210 215 220
 Pro Asn Gln Pro Ser Ser Leu Asn
 225 230

<210> 2475

<211> 1251

<212> DNA

<213> Homo sapiens

<400> 2475

ngcgcgcccc agatgcaggt gagcaagagg atgctggcgg ggggcgtgag gagcatgccc
 60
 agccccctcc tggcctgctg gcagcccatc ctctgctgg tgctgggctc agtgctgtca
 120
 ggctcggcca cgggctgccc gccccgctgc gagtgctccg cccaggaccg cgctgtgctg
 180
 tgccaccgca agcgctttgt ggcagtcctc gagggcatcc ccaccgagac gcgcctgctg
 240
 gacctaggca agaaccgcat caaaacgctc aaccaggacg agttcgccag cttcccgcac
 300
 ctggaggagc tggagctcaa cgagaacatc gtgagcgccg tggagcccgg cgccttcaac
 360
 aacctcttca acctccggac gctgggtctc cgcagcaacc gcctgaagct catcccgcta
 420
 ggcgtcttca ctggcctcag caacctgacc aagctggaca tcagcgagaa caagatcggt
 480

atcctactgg actacatggt tcaggacctg tacaacctca agtcactgga ggttggcgac
 540
 aatgacctcg tctacatctc tcaccgcgcc ttcagcggcc tcaacagcct ggagcagctg
 600
 acgctggaga aatgcaacct gacctccatc cccaccgagg cgctgtccca cctgcacggc
 660
 ctcatcgccc tgaggctccg gcacctcaac atcaatgcca tccgggacta ctccttcaag
 720
 aggctgtacc gactcaaggt cttggagatc tcccactggc cctacttgga caccatgaca
 780
 cccaactgcc tctacggcct caacctgacg tccctgtcca tcacacactg caatctgacc
 840
 gctgtgccct acctggccgt ccgccacctg gtctatctcc gcttcctcaa cctctcctac
 900
 aaccccatca gcaccattga gggctccatg ttgcatgagc tgctccggct gcaggagatc
 960
 cagctgggtg gcgggcagct ggccgggtgg agccctgcct tccgcggcct caactacctg
 1020
 cgcgtgctca atgtctctgg caaccagctg accacactgg aggaatcagt cttccactcg
 1080
 gtgggcaacc tggagacact catcctggac tccaaccgcg tggcctgoga ctgtcggctc
 1140
 ctgtgggtgt tccggcgccg tggcctacaa acttcaaccg gcagcagccc acgtgcgcca
 1200
 cgccccagtt tgtccagggg caaggagttc aaggacttcc ctgatgtgct a
 1251

<210> 2476

<211> 417

<212> PRT

<213> Homo sapiens

<400> 2476

Xaa	Ala	Pro	Glu	Met	Gln	Val	Ser	Lys	Arg	Met	Leu	Ala	Gly	Gly	Val
1				5				10					15		
Arg	Ser	Met	Pro	Ser	Pro	Leu	Leu	Ala	Cys	Trp	Gln	Pro	Ile	Leu	Leu
			20					25				30			
Leu	Val	Leu	Gly	Ser	Val	Leu	Ser	Gly	Ser	Ala	Thr	Gly	Cys	Pro	Pro
		35					40				45				
Arg	Cys	Glu	Cys	Ser	Ala	Gln	Asp	Arg	Ala	Val	Leu	Cys	His	Arg	Lys
	50					55					60				
Arg	Phe	Val	Ala	Val	Pro	Glu	Gly	Ile	Pro	Thr	Glu	Thr	Arg	Leu	Leu
65					70				75					80	
Asp	Leu	Gly	Lys	Asn	Arg	Ile	Lys	Thr	Leu	Asn	Gln	Asp	Glu	Phe	Ala
			85					90					95		
Ser	Phe	Pro	His	Leu	Glu	Glu	Leu	Glu	Leu	Asn	Glu	Asn	Ile	Val	Ser
		100						105					110		
Ala	Val	Glu	Pro	Gly	Ala	Phe	Asn	Asn	Leu	Phe	Asn	Leu	Arg	Thr	Leu
	115					120					125				
Gly	Leu	Arg	Ser	Asn	Arg	Leu	Lys	Leu	Ile	Pro	Leu	Gly	Val	Phe	Thr
	130					135					140				
Gly	Leu	Ser	Asn	Leu	Thr	Lys	Leu	Asp	Ile	Ser	Glu	Asn	Lys	Ile	Val
145					150				155					160	
Ile	Leu	Leu	Asp	Tyr	Met	Phe	Gln	Asp	Leu	Tyr	Asn	Leu	Lys	Ser	Leu

[illegible]

<210> 2477

<211> 548

<212> DNA

<213> Homo sapiens

<400> 2477

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nagactgcga tcagacgcgc gtgccagct gaaccaggtg cgtgagaagg ctgccttcag
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gtggccgggg gctccctcca gctgtctctg gacggaggga cgggaagtgg ccagaagggg
120
aagtgtgagg agttcccgtc cagcctgtca tcagtctccc caggtcttga agcggcgggc
180
ctgctcctgg ccgtgaccat ggaccctctg gagacccta tcaaggatgg catcctctac
240
cagcagcatg tcaagtttgg caagaagtgc tggcggaagg tgtgggctct gctgtatgca
300
ggagggccat caggcgtggc acggctggag aactgggagg tccgggatgg tggcctggga
360
gcagcgggtg acaggtcggc ggggcctggc cggcgagggg agcgacgggt catccgcctg
420

```

gctgactgtg tgtccgtgct gccggctgac ggcgagagct gccccggga caccggtgcc
 480
 ttctgtctca ccaccaccga gcgaagccat ctactggctg ctcagcaccg ccaggcctgg
 540
 atggggccc
 548

<210> 2478<211> 113

<212> PRT

<213> Homo sapiens

<400> 2478

Leu	Glu	Thr	Pro	Ile	Lys	Asp	Gly	Ile	Leu	Tyr	Gln	Gln	His	Val	Lys
1				5				10					15		
Phe	Gly	Lys	Lys	Cys	Trp	Arg	Lys	Val	Trp	Ala	Leu	Leu	Tyr	Ala	Gly
			20					25					30		
Gly	Pro	Ser	Gly	Val	Ala	Arg	Leu	Glu	Asn	Trp	Glu	Val	Arg	Asp	Gly
			35				40					45			
Gly	Leu	Gly	Ala	Ala	Gly	Asp	Arg	Ser	Ala	Gly	Pro	Gly	Arg	Arg	Gly
	50					55					60				
Glu	Arg	Arg	Val	Ile	Arg	Leu	Ala	Asp	Cys	Val	Ser	Val	Leu	Pro	Ala
65					70					75					80
Asp	Gly	Glu	Ser	Cys	Pro	Arg	Asp	Thr	Gly	Ala	Phe	Leu	Leu	Thr	Thr
				85					90					95	
Thr	Glu	Arg	Ser	His	Leu	Leu	Ala	Ala	Gln	His	Arg	Gln	Ala	Trp	Met
			100					105					110		

Gly

<210> 2479

<211> 324

<212> DNA

<213> Homo sapiens

<400> 2479

gaattcatgg aggtctatga ggaggatgaa gaatatgcgt atgaaaaata tgaaacccat
 60
 ttcggcacga gctggatgga ggagaccgca ggcacottct cactgaactg gtatcgcagc
 120
 aggtactgga atgacaatga agcagcagaa aggcttgcgt tgatgtgggc taaaaccttc
 180
 aaatatgcgt cgataaacgt ctctggcag accgggatta gcaatagcga cgacgagggc
 240
 aatgaagatg aagacatggt ctacgccggt atctccattc cgctgggagg cggggcgtag
 300
 tctaactcct ggtatcgtga atat
 324

<210> 2480

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2480

Glu Phe Met Glu Val Tyr Glu Glu Asp Glu Glu Tyr Ala Tyr Glu Lys
 1 5 10 15
 Tyr Glu Thr His Phe Gly Thr Ser Trp Met Glu Glu Thr Ala Gly Thr
 20 25 30
 Phe Ser Leu Asn Trp Tyr Arg Ser Arg Tyr Trp Asn Asp Asn Glu Ala
 35 40 45
 Ala Glu Arg Leu Ala Leu Met Trp Ala Lys Thr Phe Lys Tyr Ala Ser
 50 55 60
 Ile Asn Val Ser Trp Gln Thr Gly Ile Ser Asn Ser Asp Asp Glu Gly
 65 70 75 80
 Asn Glu Asp Glu Asp Met Phe Tyr Ala Gly Ile Ser Ile Pro Leu Gly
 85 90 95
 Gly Gly Ala Tyr Ser Asn Ser Trp Tyr Arg Glu Tyr
 100 105

<210> 2481

<211> 484

<212> DNA

<213> Homo sapiens

<400> 2481

gcgttcacta acgcttcaac aaactcttac aagcgtcttg ttcctgggtt cgaagcacct
 60
 gttatgttgg cttactcagc tcgtaaccgt tctgcttcta tccgtatccc atacgttgca
 120
 agccctaaag gcaagcgtat tgaagctcgt ttccctgata caaccgctaa cccataccta
 180
 gcattttcag ctatgttgat ggctgggtatc gatggtatca aaaacaagat tcaccctggc
 240
 gatgcagcag acaaagattt gtacgacctt ccagctgaag aagcagccgc tatccctcaa
 300
 gttgctagca gcttagaaga agcgtttaag tgcctagatc aagaccgtga gttcttgact
 360
 caaggtggcg ttttctctga cgacatgata gatgcttaca tcgctcttaa agcagaagaa
 420
 gcacagcgtg ttgcaatgac aacaacacca cttgagttcg aactttacta cagcctataa
 480
 gctt
 484

<210> 2482

<211> 159

<212> PRT

<213> Homo sapiens

<400> 2482

Ala Phe Thr Asn Ala Ser Thr Asn Ser Tyr Lys Arg Leu Val Pro Gly
 1 5 10 15
 Phe Glu Ala Pro Val Met Leu Ala Tyr Ser Ala Arg Asn Arg Ser Ala
 20 25 30
 Ser Ile Arg Ile Pro Tyr Val Ala Ser Pro Lys Gly Lys Arg Ile Glu
 35 40 45
 Ala Arg Phe Pro Asp Pro Thr Ala Asn Pro Tyr Leu Ala Phe Ser Ala
 50 55 60

```

Met Leu Met Ala Gly Ile Asp Gly Ile Lys Asn Lys Ile His Pro Gly
65          70          75          80
Asp Ala Ala Asp Lys Asp Leu Tyr Asp Leu Pro Ala Glu Glu Ala Ala
      85          90          95
Ala Ile Pro Gln Val Ala Ser Ser Leu Glu Glu Ala Leu Lys Cys Leu
      100         105         110
Asp Gln Asp Arg Glu Phe Leu Thr Gln Gly Gly Val Phe Ser Asp Asp
      115         120         125
Met Ile Asp Ala Tyr Ile Ala Leu Lys Ala Glu Glu Ala Gln Arg Val
      130         135         140
Ala Met Thr Thr Thr Pro Leu Glu Phe Glu Leu Tyr Tyr Ser Leu
145          150          155

```

<210> 2483

<211> 477

<212> DNA

<213> Homo sapiens

<400> 2483

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acgcgtgtta gccaaatctt ggttcctccc gttctctcct taccgcagcc tgaggccctt
60
ctggagaaca ggcagcctct gaggaacct ctgatccccg atcagccacc ccatcgcttg
120
cgtccccagc cgcttcctcc tggccttggt ccccctccc tgtgaaggag agaacagttt
180
cggctggccc tgagatgctg gcaggcctgc agtcagggca gtgggcgcct ccaccttga
240
aatggctcct cgtaggtgcag ttctgcttac ggggtagact ttgttgctt ccacagagga
300
cagttagggg gggcaggaag gaagtctctg ccacaagtct gcattccagg ctgtttccag
360
aagtgggaat tctctcgtgc cctggagtct gggaatgcat ttttagtttc ccagcttcag
420
gtagaattga aattgagtga gccaaaccac cacatccatc tggagccagg aactagt
477

```

<210> 2484

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2484

```

Met His Ser Gln Thr Pro Gly His Glu Arg Ile Pro Thr Ser Gly Asn
1          5          10          15
Ser Leu Glu Cys Arg Leu Val Ala Glu Thr Ser Phe Leu Pro Thr Leu
      20          25          30
Thr Val Leu Cys Gly Arg Gln Gln Ser Leu Pro Arg Lys Gln Asn Cys
      35          40          45
Thr Thr Lys Asp His Phe Lys Val Gly Gly Ala His Cys Pro Asp Cys
      50          55          60
Arg Pro Ala Ser Ile Ser Gly Pro Ala Glu Thr Val Leu Ser Phe Thr
65          70          75          80
Gly Lys Gly Glu Gln Gly Gln Glu Glu Ala Ala Gly Asp Ala Gly Asp
      85          90          95

```


Gly Val Ala Asp Arg Gly Ser Glu Val Ser Ser Glu Ala Ala Cys Ser
 100 105 110
 Pro Glu Gly Pro Gln Ala Arg Val Arg Arg Glu Arg Glu Glu Pro Arg
 115 120 125
 Phe Gly
 130

<210> 2485

<211> 608

<212> DNA

<213> Homo sapiens

<400> 2485

accggtgagg cgaagtgcgg tggcaattac gcagcttcgc tgcgttccca gatcgatgcc
 60
 aagacccgcg actgcaacga ggtgctcttt gtcgatgcag ttgaacatcg ctggatcgag
 120
 gagctgggtg gtatgaactt catggccatc agcaaagacg gtcagctcgt ccccccgag
 180
 ctagctggca ccatactgcg tggcgtgacc cgcaagtcca ttctggaagt tgccccgac
 240
 ctgggtcttg aaccagtgga gcgcaagatc gatgttgacg agctccttga tggcgttcgc
 300
 tctggcgagt tcccgggaagt cttcgctgtt ggtaccgccc cggttgtcac accgatcggc
 360
 tctttcttag atggagatac cgacgtgaag gtctctgagc ccaccggaaa gaccacgatg
 420
 gagatccgtc gccgtctgct ggatatccag ttcggacgcg ctgaggacac ccattggctgg
 480
 ttgaagcgag tctgctgacg gcgtcgacga ccattggggc cggccccaat gatgtgttca
 540
 cgatcgggct acgacggtgt cgatgacaat gtcttgccgc tggaagggtt gcccgacggt
 600
 gaacgcgt
 608

<210> 2486

<211> 165

<212> PRT

<213> Homo sapiens

<400> 2486

Thr Gly Glu Ala Lys Cys Gly Gly Asn Tyr Ala Ala Ser Leu Arg Ser
 1 5 10 15
 Gln Ile Asp Ala Lys Thr Arg Asp Cys Asn Glu Val Leu Phe Val Asp
 20 25 30
 Ala Val Glu His Arg Trp Ile Glu Leu Gly Gly Met Asn Phe Met
 35 40 45
 Ala Ile Ser Lys Asp Gly Gln Leu Val Thr Pro Glu Leu Ala Gly Thr
 50 55 60
 Ile Leu Arg Gly Val Thr Arg Lys Ser Ile Leu Glu Val Ala Pro Asp
 65 70 75 80
 Leu Gly Leu Glu Pro Val Glu Arg Lys Ile Asp Val Asp Glu Leu Leu
 85 90 95

```

Asp Gly Val Arg Ser Gly Glu Phe Pro Glu Val Phe Ala Cys Gly Thr
      100                      105                      110
Ala Ala Val Val Thr Pro Ile Gly Ser Phe Leu Asp Gly Asp Thr Asp
      115                      120                      125
Val Lys Val Ser Glu Pro Thr Gly Lys Thr Thr Met Glu Ile Arg Arg
      130                      135                      140
Arg Leu Leu Asp Ile Gln Phe Gly Arg Ala Glu Asp Thr His Gly Trp
145                      150                      155                      160
Leu Lys Arg Val Cys
      165

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<210> 2487

<211> 339

<212> DNA

<213> Homo sapiens

<400> 2487

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nnccccctcag gagagcagcc catggaaggt cccccccaag gggccctga gagcctgac
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agtctgcaaa gaaaccagaa agagctccag ggcctcctga cccaggtgca agccctggag
120
aaggaggccg caagcagtgt ggacgtgcag gccctgcgga ggctctttga ggccgtgccc
180
cagctgggag gggctgctcc tcaggctcct gctgccacc aaaagcccga ggcctcagt
240
gagcaggcct ttggggagct gacacgggtc agcacggaag ttgctcaact gaaggaacag
300
accttggtaa ggctgctgga cattgaagag gctgtgcac
339

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<210> 2488

<211> 113

<212> PRT

<213> Homo sapiens

<400> 2488

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Xaa Pro Ser Gly Glu Gln Pro Met Glu Gly Pro Pro Gln Gly Ala Pro
  1           5           10           15
Glu Ser Pro Asp Ser Leu Gln Arg Asn Gln Lys Glu Leu Gln Gly Leu
      20           25           30
Leu Thr Gln Val Gln Ala Leu Glu Lys Glu Ala Ala Ser Ser Val Asp
      35           40           45
Val Gln Ala Leu Arg Arg Leu Phe Glu Ala Val Pro Gln Leu Gly Gly
      50           55           60
Ala Ala Pro Gln Ala Pro Ala Ala His Gln Lys Pro Glu Ala Ser Val
65           70           75           80
Glu Gln Ala Phe Gly Glu Leu Thr Arg Val Ser Thr Glu Val Ala Gln
      85           90           95
Leu Lys Glu Gln Thr Leu Val Arg Leu Leu Asp Ile Glu Glu Ala Val
100           105           110
His

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<210> 2489

<211> 594
 <212> DNA
 <213> Homo sapiens

<400> 2489
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 aactggctgg tcaccatcta tcacggccgg gtgcgtatca ccagccaggt tctttggacc
 120
 ctgggcttca tggtgacctt cgcgatcgga ggcatgaccg gcgtactgct ggccatcccg
 180
 ggtgctgact tcgtactgca caacagcctg ttcggaattg ctcacttcca caacgtgatc
 240
 atcggcgggc cagtattcgg ctacatcgca ggtttcagct tctacttccc gaaagcgttc
 300
 ggcttcaagc tgcacgaaag ctggggcaag gctgcattct ggttctggat ctcgggcttc
 360
 ttcgctcgct tcatgccgct ctatgcactg ggtttcatgg gcatgaccg ttgtttgaac
 420
 gccccccca cccctgagtg ggtcccgta cgtgacgttg ccatggtcgg tgcactgatg
 480
 atcgtgtcg gtatgcctg ccagttgatt cagctgtatg tcagcgtgcg tgatcgcaag
 540
 cagaacatgt gcgaatccgg cgacccatgg aatgcacaca cctggaatg gtcg
 594

<210> 2490
 <211> 198
 <212> PRT
 <213> Homo sapiens

<400> 2490
 Xaa Ala Phe Phe Gly Leu Ala Thr Met Leu Ile Ser Ile Pro Thr Gly
 1 5 10 15
 Val Lys Leu Phe Asn Trp Leu Val Thr Ile Tyr His Gly Arg Val Arg
 20 25 30
 Ile Thr Ser Gln Val Leu Trp Thr Leu Gly Phe Met Val Thr Phe Ala
 35 40 45
 Ile Gly Gly Met Thr Gly Val Leu Leu Ala Ile Pro Gly Ala Asp Phe
 50 55 60
 Val Leu His Asn Ser Leu Phe Gly Ile Ala His Phe His Asn Val Ile
 65 70 75 80
 Ile Gly Gly Ala Val Phe Gly Tyr Ile Ala Gly Phe Ser Phe Tyr Phe
 85 90 95
 Pro Lys Ala Phe Gly Phe Lys Leu His Glu Ser Trp Gly Lys Ala Ala
 100 105 110
 Phe Trp Phe Trp Ile Ser Gly Phe Phe Val Ala Phe Met Pro Leu Tyr
 115 120 125
 Ala Leu Gly Phe Met Gly Met Thr Arg Cys Leu Asn Ala Pro Pro Thr
 130 135 140
 Pro Glu Trp Val Pro Tyr Leu Tyr Val Ala Met Val Gly Ala Leu Met
 145 150 155 160
 Ile Ala Val Gly Ile Ala Cys Gln Leu Ile Gln Leu Tyr Val Ser Val
 165 170 175

Arg Asp Arg Lys Gln Asn Met Cys Glu Ser Gly Asp Pro Trp Asn Ala
 180 185 190
 His Thr Leu Glu Trp Ser
 195

<210> 2491

<211> 592

<212> DNA

<213> Homo sapiens

<400> 2491

acgcgtcacg caactgtcaa acttgccaat ccgcttgacg atactcgccc ctacctacgc
 60
 actacgttgt tgccctggtct attccatgca gtaacgacga atatgtcgcg atctcaggat
 120
 gatcttgcag tggtcgaaaag cggaactgta ttccgcgccg tcaactccggc tgcggcacccg
 180
 cgccccgggt tcgacgagcg cccctccgat gaagtccttg ccgagatcga cgccgccttg
 240
 ccagcccagc cgcgcgatgct cgcggccgtg atctgtggca gctggctgcc cgatcgctgg
 300
 gatggagagt cgggtcaaggc tgactggcga cacgctgtgc tggtcgcccga gaaggctgct
 360
 gatgctcttg gcgtgaggct ggtgcgcaag gctgaccgtc aggetccatg gcatcccggt
 420
 cgttgtgcgg ctctcatcgt cgatgggaag gtcattggcc atgctgggtga gttgcacccc
 480
 acagtagtgt cgaaggctgg tctgcctcag cgcacctgtg cggtcgagtt caatctagat
 540
 gctttggtag cctgcgctcc gagcgggtggt gaggtcatgg ttatttcaag gt
 592

<210> 2492

<211> 197

<212> PRT

<213> Homo sapiens

<400> 2492

Thr Arg His Ala Thr Val Lys Leu Ala Asn Pro Leu Asp Asp Thr Arg
 1 5 10 15
 Pro Tyr Leu Arg Thr Thr Leu Leu Pro Gly Leu Phe His Ala Val Thr
 20 25 30
 Thr Asn Met Ser Arg Ser Gln Asp Asp Leu Ala Val Phe Glu Ser Gly
 35 40 45
 Thr Val Phe Arg Ala Val Thr Pro Ala Ala Ala Pro Arg Pro Gly Val
 50 55 60
 Asp Glu Arg Pro Ser Asp Glu Val Leu Ala Glu Ile Asp Ala Ala Leu
 65 70 75 80
 Pro Ala Gln Pro Arg Met Leu Ala Ala Val Ile Cys Gly Ser Trp Leu
 85 90 95
 Pro Asp Arg Trp Asp Gly Glu Ser Val Lys Ala Asp Trp Arg His Ala
 100 105 110
 Val Leu Val Ala Gln Lys Ala Ala Asp Ala Leu Gly Val Arg Leu Val
 115 120 125

Arg Lys Ala Asp Arg Gln Ala Pro Trp His Pro Gly Arg Cys Ala Ala
 130 135 140
 Leu Ile Val Asp Gly Lys Val Ile Gly His Ala Gly Glu Leu His Pro
 145 150 155 160
 Thr Val Val Ser Lys Ala Gly Leu Pro Gln Arg Thr Cys Ala Val Glu
 165 170 175
 Phe Asn Leu Asp Ala Leu Val Ala Cys Ala Pro Ser Gly Gly Glu Val
 180 185 190
 Met Val Ile Ser Arg
 195

<210> 2493

<211> 418

<212> DNA

<213> Homo sapiens

<400> 2493

acgcgtcagg ttgccggtga tcgtgccacc gtcacctcca tggcgccttc aggagcagac
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 cccacacact atgagccgctc gctgcgtgac gttcggaccg tcgtgtattc gagagtgcgcg
 120
 ctatcgaact acctcatgct cgaacctcat tcggatcatca agaccatcga ctcttcctta
 180
 cctacgggat ctatcaatgt ctccctggct gaggaagccc aaaagtacgg cgcacaagtg
 240
 atcccgcctgg ttgaaaatgc caacctagac accgtgtggc tgggggttgcg cgtcattggc
 300
 aagggcgcca ggcgggggagc cgaccgctct tcctcggctc acctccagct gacgtcgggtg
 360
 gaggggcctg gggacttcac tgcctatata actgggacct ttggtcgacc tcagatct
 418

<210> 2494

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2494

Thr Arg Gln Val Ala Gly Asp Arg Ala Thr Val Thr Ser Met Val Pro
 1 5 10 15
 Ser Gly Ala Asp Pro His Thr Tyr Glu Pro Ser Leu Arg Asp Val Arg
 20 25 30
 Thr Val Val Tyr Ser Arg Val Ala Leu Ser Asn Tyr Leu Met Leu Glu
 35 40 45
 Pro His Ser Val Ile Lys Thr Ile Asp Ser Ser Leu Pro Thr Gly Ser
 50 55 60
 Ile Asn Val Ser Leu Ala Glu Glu Ala Gln Lys Tyr Gly Ala Gln Val
 65 70 75 80
 Ile Pro Leu Val Glu Asn Ala Asn Leu Asp Thr Val Trp Leu Gly Leu
 85 90 95
 Arg Val Ile Gly Lys Gly Ala Arg Arg Gly Ala Asp Arg Ser Ser Ser
 100 105 110
 Val Tyr Leu Gln Leu Thr Ser Val Glu Gly Pro Gly Asp Phe Thr Ala
 115 120 125

Tyr Ile Thr Gly Thr Phe Gly Arg Pro Gln Ile
 130 135

<210> 2495

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 2495

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nnggcctggc ccagttgcac cagcagcgct ggcgacactc gggcgggcag tcggtctgtc
60
agtcctcccc ccaggtcccc cgccccgcac ctgcgcgccg cacctgcagc tccgcacctg
120
cgccagtgct ctactgccct ctcttgccgc ccgcacctgc agccccgcac ctgcgccttg
180
cacctgcagc ccgcgcctct acccggttca agcatggctg accaggcgcc cttcgacacg
240
gacgtcaaca ccctgacctg cttcgatcat gaggagggca ggaaggcccg cggcacgggc
300
gagttgacct agctgctcaa ctgcgtctgc acagcagtc aagccatctc ttcggcggtg
360
cgcaaggcgg gcacgcgcga cctctatggc attgctggtt ctaccaacgt gacaggtgat
420
caagttaaga agctggacgt cctctccaac gacctgggta tgaacatggt aaagtcattc
480
tttgccacgt gtgttctcgt gtcagaagaa gataaacacg ccattcatagt ggaaccggag
540
aaaaggggta aatatgtggt ctgttttgat ccccttgatg gatcttccaa catcgattgc
600
cttgtgtccg ttggaacct ttttggcatc tatagaaaga aatcaactga tgagccttct
660
gagaaggatg ctctgcaacc aggccggaac ctggtggcag ccggctacgc actgtatggc
720
agtgccacca tgctggctct tgccatggac tgtggggtea actgcttcat gctggacctg
780
gccatcgggg agttcatttt ggtggacaag gatgtgaaga taaaaaagaa aggtaaaatc
840
tacagcctta acgagggcta cgccaaggac tttgacctg ccgtcactga gtacatccag
900
aggaagaagt tccccccaga taattcagct ccttatgggg ccgggtatgt gggctccatg
960
gtggctgatg ttcacgcac tctggtctac ggagggatat ttctgtacct cgctaacaag
1020
aagagcccca atggaaagct gagactgctg tacgaatgca acccatggc ctacgtcatg
1080
gagaaggctg ggggaatggc caccactggg aaggaggccg tgtagacgt cattcccaca
1140
gacattcacc agagggcgcc ggtgatcttg gggcccccg acgacgtgct cgagttcctg
1200
aaggtgtatg agaagcactc tgcccagtga gcacctgcc tgctgcac cggagaattg
1260
cctctacctg gaccttttgt ctcacacagc agtacctga cctgctgtgc accttacatt
1320

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<210> 2496
<211> 338
<212> PRT
<213> Homo sapiens
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1793

325 330 335

Ala Gln

<210> 2497
 <211> 399
 <212> DNA
 <213> Homo sapiens

<400> 2497
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 cttggctacc tgccacagga tccccgcgac ccagacatgg aaatgatcgc gagggcaagg
 120
 atcctgtcag cgcgtggcct ggaccacata ctggaacgga tgcgcaccct ggagtatcag
 180
 atggcgaacg gttccgagga cgaccgtgcc gttgcgatgg acaaatacgc gaaggctgaa
 240
 gaccgtctcg tcgcggccgg tggctatggc gcctctgcag aggcagcccg aatcgcgtcg
 300
 aacttggggc ttgacgaccg cgtcctttcc cagccgttga aaaacctctc ggggtggtcag
 360
 cgtcgtcgcg tcgagctggc gcgcaccctc ttttccgga
 399

<210> 2498
 <211> 133
 <212> PRT
 <213> Homo sapiens

<400> 2498
 Thr Arg Val Leu Ala Gly Glu Thr Leu Pro Ala Ala Gly Ser Val Arg
 1 5 10 15
 Arg Thr Gly Glu Leu Gly Tyr Leu Pro Gln Asp Pro Arg Asp Pro Asp
 20 25 30
 Met Glu Met Ile Ala Arg Ala Arg Ile Leu Ser Ala Arg Gly Leu Asp
 35 40 45
 His Ile Leu Glu Arg Met Arg Thr Leu Glu Tyr Gln Met Ala Asn Gly
 50 55 60
 Ser Glu Asp Asp Arg Ala Val Ala Met Asp Lys Tyr Ala Lys Ala Glu
 65 70 75 80
 Asp Arg Leu Val Ala Ala Gly Gly Tyr Gly Ala Ser Ala Glu Ala Ala
 85 90 95
 Arg Ile Ala Ser Asn Leu Gly Leu Asp Asp Arg Val Leu Ser Gln Pro
 100 105 110
 Leu Lys Asn Leu Ser Gly Gly Gln Arg Arg Arg Val Glu Leu Ala Arg
 115 120 125
 Ile Leu Phe Ser Gly
 130

<210> 2499
 <211> 348
 <212> DNA
 <213> Homo sapiens

<400> 2499

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nggccgggcg aagacccgtt ctatatggcc taccacgaca ccgagtgggg cgtgccggaa
60
tatgacgacc ggcgattgta cgagaagctc attctcgacg gattccaggc cggcctgtcg
120
tggatcacca tcctgcgcaa ggcgcacaac tttcgcaaag ccttcgacga tttccagccc
180
gagaagatag cgcgttacaa tgagaagaag gttcacgcgc tgatgaacga tgccggcatc
240
gtgcgcaacc gcgccaagat cgaaggcacg atcgccagcg cgaaggcgta tctcgacatc
300
atggaaaaag gcccgggctt ctccaggctg ctgtgggact tcgtcgac
348

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<210> 2500

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2500

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Xaa Pro Gly Glu Asp Pro Phe Tyr Met Ala Tyr His Asp Thr Glu Trp
1           5           10           15
Gly Val Pro Glu Tyr Asp Asp Arg Ala Leu Tyr Glu Lys Leu Ile Leu
20          25          30
Asp Gly Phe Gln Ala Gly Leu Ser Trp Ile Thr Ile Leu Arg Lys Arg
35          40          45
Asp Asn Phe Arg Lys Ala Phe Asp Asp Phe Gln Pro Glu Lys Ile Ala
50          55          60
Arg Tyr Asn Glu Lys Lys Val His Ala Leu Met Asn Asp Ala Gly Ile
65          70          75          80
Val Arg Asn Arg Ala Lys Ile Glu Gly Thr Ile Ala Ser Ala Lys Ala
85          90          95
Tyr Leu Asp Ile Met Glu Lys Gly Pro Gly Phe Ser Arg Leu Leu Trp
100         105         110
Asp Phe Val Asp
115

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<210> 2501

<211> 569

<212> DNA

<213> Homo sapiens

<400> 2501

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gaattcgatt catttgtggc aaatgcttac aatttgatga ttgtaaccca tcaaatcaca
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taatgcccac taagccactc catacacttc tttaaataagg aaaatatatg taaagtacgt
120
acttagcaca gggcctgacc tatagtaatg gtcaagaatg atagcggggg tgaggtatgg
180
ctttcaagag tcaaacaatt ttactggtgc atcatttcca tttattcttt ctcttttgca
240
taataaaaacc actcttaaga ttctaccttg gttagttaga gacaacagtt ctctggaaag
300

```

tagattctat agcttcaact ccctgaagag atgtgtgcta atttacctca aaaaaatcct
 360
 taagggtata aaatatgccca agaactgtca acatcacaga ttaccactgg tagcttctgg
 420
 tatattgtta agtttccact taatttttaa gggacactag agaattagta tgactcacct
 480
 acactaagtt tatatactgt atttaacagt gtaattttca aatatgacag gaataaccca
 540
 gatgtgaaat gctgaatcat taatcacag
 569

<210> 2502

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2502

Met	Ile	Ala	Gly	Val	Arg	Tyr	Gly	Phe	Gln	Glu	Ser	Asn	Asn	Phe	Thr
1				5				10						15	
Gly	Ala	Ser	Phe	Pro	Phe	Ile	Leu	Ser	Leu	Leu	His	Asn	Lys	Thr	Thr
			20				25						30		
Leu	Lys	Ile	Leu	Pro	Trp	Leu	Val	Arg	Asp	Asn	Ser	Ser	Leu	Glu	Ser
		35				40					45				
Arg	Phe	Tyr	Ser	Phe	Asn	Ser	Leu	Lys	Arg	Cys	Val	Leu	Ile	Tyr	Ile
	50				55					60					
Lys	Lys	Ile	Leu	Lys	Gly	Ile	Lys	Tyr	Ala	Lys	Asn	Cys	Gln	His	His
65				70				75					80		
Arg	Leu	Pro	Leu	Val	Ala	Ser	Gly	Ile	Leu	Leu	Ser	Phe	His	Leu	Ile
			85				90						95		
Phe	Lys	Gly	His												
			100												

<210> 2503

<211> 419

<212> DNA

<213> Homo sapiens

<400> 2503

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 aaggccttgc tacctcagca gtcctacagc ttggcccagc cgctgtattc tccagtctgc
 120
 accaatgggg agcgttttct ctacctgccg ccacctcact acgtcgggtcc ccacatccca
 180
 tcgtccttgg catcacccat gaggtctctg acaccttcgg cctccccagc catcccgcct
 240
 ctggtccatt gcgcagacaa aagcctcccg tggaagatgg gcgtcagccc tgggaatcct
 300
 gttgattccc acgcctatcc tcacatccag aacagtaagc agcccagggt tccctctgcc
 360
 aaggcgttca ccagtggcct gccgggggac acagctctcc tgttgccccc ctcacgcgt
 419

<210> 2504

<211> 121
 <212> PRT
 <213> Homo sapiens

<400> 2504
 Met Tyr Lys Ala Leu Leu Pro Gln Gln Ser Tyr Ser Leu Ala Gln Pro
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 Leu Tyr Ser Pro Val Cys Thr Asn Gly Glu Arg Phe Leu Tyr Leu Pro
 20 25 30
 Pro Pro His Tyr Val Gly Pro His Ile Pro Ser Ser Leu Ala Ser Pro
 35 40 45
 Met Arg Leu Ser Thr Pro Ser Ala Ser Pro Ala Ile Pro Pro Leu Val
 50 55 60
 His Cys Ala Asp Lys Ser Leu Pro Trp Lys Met Gly Val Ser Pro Gly
 65 70 75 80
 Asn Pro Val Asp Ser His Ala Tyr Pro His Ile Gln Asn Ser Lys Gln
 85 90 95
 Pro Arg Val Pro Ser Ala Lys Ala Val Thr Ser Gly Leu Pro Gly Asp
 100 105 110
 Thr Ala Leu Leu Leu Pro Pro Ser Arg
 115 120

<210> 2505
 <211> 540
 <212> DNA
 <213> Homo sapiens

<400> 2505
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 ccgctcgtgt tgggtgccgtt ggctcgggttc accggcgatc ggcgtctgat gggccaatgg
 120
 acgaatgggc gtgtcatggc cgccatcgcg tggatcgctg tggcagcagt ctcggtcttc
 180
 aacgtgggttc tcgtcgtcga gacgggtcatg ggtgcatgat ccttgagggc agttttctgg
 240
 cgacaatcgt gaaaatgagt gacaaactca agcgggtgac gacgccgaac cccgcaccga
 300
 cctctgcccc cgagctagcc aacgatttgg ccactgcatt tcgcgggtac cctgctggag
 360
 tggcgatcct caccgacgatg ggagcggctg ggcccagagg cttgacggtc tcctccctgg
 420
 cgtcgggtgtc agtcgtcccg gctgttggtg cggtgtcggt gggtaatggt tcgacgaccc
 480
 tggccaccct gacggaggag tcccgcgtca tcgtccacat gcttgatgca gatcgcgcg
 540

<210> 2506
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 2506
 Ser Gly Ala Asn Pro Thr Gln Ala Leu Val Trp Ser Gln Val Leu Leu

1	5	10	15
Ser Met Gly Leu Pro Leu Val Leu Val Pro Leu Ala Arg Phe Thr Gly			
	20	25	30
Asp Arg Arg Leu Met Gly Gln Trp Thr Asn Gly Arg Val Met Ala Ala			
	35	40	45
Ile Ala Trp Ile Val Val Ala Ala Val Ser Ala Leu Asn Val Val Leu			
	50	55	60
Val Val Glu Thr Val Met Gly Ala			
65	70		

<210> 2507

<211> 922

<212> DNA

<213> Homo sapiens

<400> 2507

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 60
 agcttcatgc ccccaggaca taaatagccc ggctgctgca ggtacctgaa ggagttcagg
 120
 acggagcagt gccccctggt ttcacagcac aagtgcgcgc agcaccggcc gttcacctgc
 180
 ttccactggc acttctctaa ccagcggcgc cgcaggcccc tccgcaggcg cgacggcacc
 240
 ttcaactaca gccccgacgt gtactgtctc aagtacaacg aagccaccgg cgtgtgcccc
 300
 gacggcgacg agtgtcccta cctgcaccgg acgacggggg acacagaacg caagtaccac
 360
 ctgcgttact aaaaaacagg aacctgcac cagagacag acgcacgtgg cactgcgtg
 420
 aagaatgggc tgcactgtgc cttcgcgcac gggccccatg acctccgctc ccctgtctac
 480
 gacatcaggg agcttcaggc catggaggcc ttgcagaatg gccagaccac ggtagagggg
 540
 agcatagagg gccagtcggc tggggctgcg agccatgcc tgaatagaaa gatcctcagc
 600
 gaggagcctc ggtggcaaga gactgcttat gtgctgggga actataagac ggagccttgc
 660
 aagaagcccc cgcggctgtg ccgccaaggc tatgcctgtc cctactacca caacagcaag
 720
 gaccggcggc ggagcccccg gaagcacaaa tacaggctcg ctccatgtcc aaacgtcaag
 780
 cacggggatg agtggggaga ccctggcaag tgtgagaacg gagacgcctg ccagtactgc
 840
 cacacccgca ccgagcagca gttccacccc gagatctaca agtccaccaa gtgcaacgga
 900
 aggggggggg gggtagggga gg
 922

<210> 2508

<211> 278

<212> PRT

<213> Homo sapiens